LPC# 2010300031- Winnebago
Rexnord,Inc., Rockford Products Plt. #3
ILD005212097
Superfund/HRS
Volume 1 of 2

CERCLA
Screening Site Inspection Report

Illinois Environmental Protection Agency
P.O. Box 19276
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Confidential Material May be Enclosed

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1. INTRODUCTION

Illinois Environmental Protection Agency's Pre-Remedial Unit was tasked by the United States Environmental Protection Agency (USEPA) to conduct a screening site inspection of the Rexnord, Rockford Products Plant #3 facility.

The site was initially discovered by the Illinois EPA in March of 1988. The site was evaluated in the form of a Preliminary Assessment (PA) that was completed by John Morgan of the Illinois EPA and submitted to USEPA. IEPA's Pre-Remedial Unit prepared a screening site inspection (SSI) work plan for the Rockford Products facility that was approved by USEPA. The SSI was conducted on August 16-17, 1989 with the collection of sixteen samples (seven soil and nine water).

The purposes of an SSI have been stated by USEPA in a directive outlining Pre-Remedial program strategies. The directive states:

> All sites will receive a screening SI to 1) collect additional data beyond the PA to enable a more refined preliminary HRS [Hazard Ranking System] score, 2) establish priorities among sites most likely to qualify for the NPL [National Priorities List], and 3) identify the most critical data requirements for the listing SI step. A screening SI will not have rigorous data quality objectives (DQOs). Based on the refined preliminary HRS score and other technical judgement factors, the site will then either be designated as NFRAP [no further remedial action planned], or carried forward as an NPL listing candidate. A listing SI will not automatically be done on these sites, however. First, they will go through a management evaluation to determine whether they can be addressed by another authority such as RCRA (Resource Conservation and Recovery Act].... Sites that are designated NFRAP or deferred to other statues are not candidates for a listing SI.
>
> The listing SI will address all the data requirements of the revised HRS using field screening and NPL level DQOs. It may also provide needed data

in a format to support remedial investigation work plan development. Only sites that appear to score high enough for listing and that have not been deferred to another authority will receive a listing SI (U.S. EPA 1988).

U.S. EPA Region V has also instructed IEPA to identify sites during the SSI that may require removal action to remediate an immediate human health and/or environmental threat.

2. SITE BACKGROUND

2.1 INTRODUCTION

This section includes information obtained from the SSI work plan preparation.

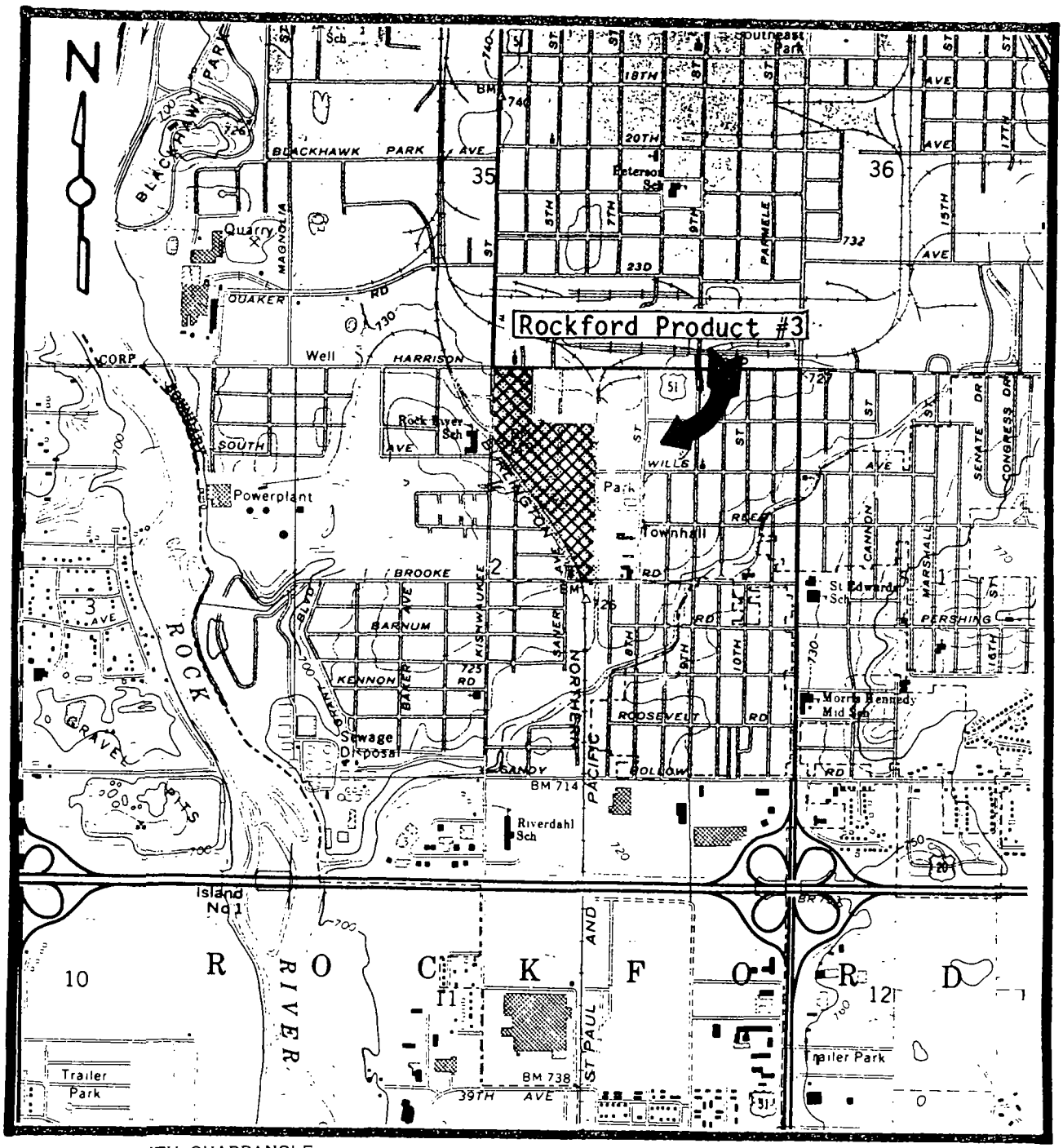
2.2 SITE DESCRIPTION

The Rexnord, Inc., Rockford Products #3 site is an active facility located in a heavily industrialized southeast part of Rockford at 707 Harrison Avenue approximately 3/4 mile east of the Rock River. The site consist of a main office building, an attached manufacturing facility, a seepage pit, an abandoned on-site landfill, an inoperative waste oil incinerator (Brule incinerator), and a closed RCRA hazardous waste incinerator (Prenco incinerator).

The property consist of approximately 27 acres described as the NW 1/4, NE 1/4 of Section 2, Township 43 North, Range 1 East, Winnebago County, Illinois (see Figure 2-1). A 4-mile radius map and surface water route map of the Rexnord, Inc., Rockford Products #3 site is provided in Appendix A and Appendix B, respectively.

2.3 SITE HISTORY

The facility was constructed and began operation as a manufacturer of screws, bolts and other types of metal fasteners in 1954. The facility



ROCKFORD SOUTH QUADRANGLE
ILLINOIS
7 5 MINUTE SERIES (TOPOGRAPHIC)

SCALE 1 24 000

1 0 1/2 1 MILE

1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

1 5 0 1 KILOMETER

CONTOUR INTERVAL 10 FEET
DOTTED LINES REPRESENT 5-FOOT CONTOURS
NATIONAL GEODETIC VERTICAL DATUM OF 1929

FIGURE 2-1 SITE LOCATION

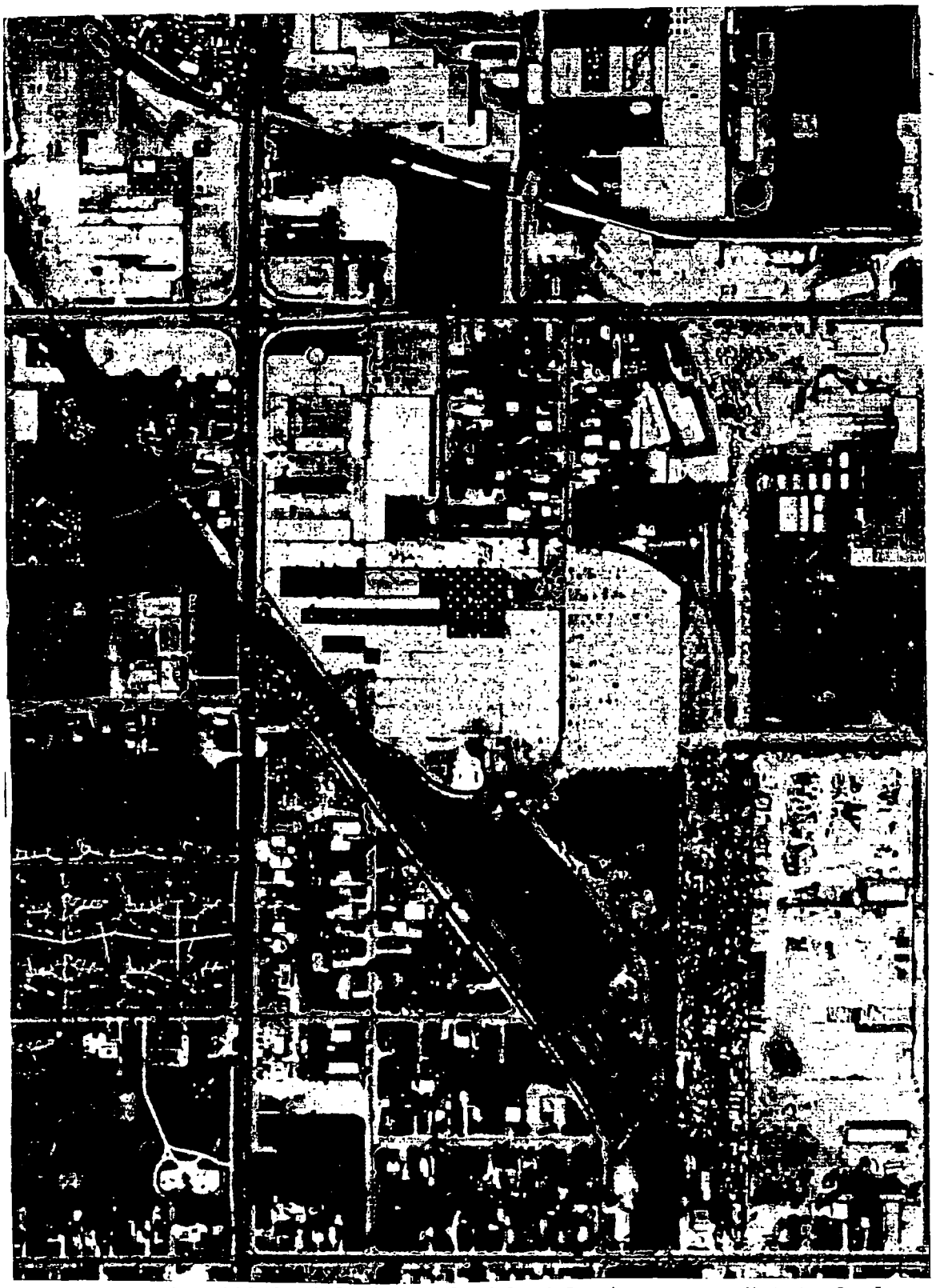
initially operated under the name of Rockford Products Company from approximately 1954 to 1976. In 1976 the facility was purchased by Rexnord, Inc. During November of 1985 the facility became an employee owned company as a result of an employee stock option plan offered by Rexnord. The name was then changed from Rexnord to Rockford Products Corporation.

The seepage pit, which consumes a surface area of approximately one acre with a maximum depth of eleven feet, was created in the mid 1950's when on-site soils were excavated and used during the initial construction of the facility. A review of historic aerial photographs from the years 1945, 1958, 1964, 1976 and 1988 indicate the excavation was first evident during 1958 (see Figure 2-2 & Figure 2-3). Surface drainage of storm water from the facilities roof, parking lots and surrounding residential areas combined with non-contact cooling water that originates from the on-site production well are all discharged to the seepage pit. According to an interview with a Rockford Products representative during a field inspection conducted by IEPA personnel on November 1, 1984, disposing of waste oil into the seepage pit was a common practice up until January of 1984.

Past analyses of water samples collected from the seepage pit and production well indicated the presence of volatile organic contamination. As a result of the detected contamination, Rockford Products was required to obtain a water pollution control permit (No. 1984-EO-0221) for the seepage from the Illinois EPA/DWPC. Permit conditions required Rockford Products to install monitor wells around the site to determine the impact the seepage pit was having on the underlying groundwater. Samples collected from the monitor wells confirmed the migration of contaminants from the seepage pit to the underlying groundwater.

Source: IEPA, 1958 Aerial Photo, Rockford Produucts. Not to scale

FIGURE 2-2



Source: IEPA, 1988 Aerial Photo, Rockford Products. Not to Scale

FIGURE 2-3

The abandoned on-site landfill, which is located south of the seepage pit, reportedly operated from 1968-1978. The landfill dimensions are approximately 100 feet in length by 35 feet wide with a depth of 11 to 12 feet. According to representatives of Rockford products, the landfill accepted machinery parts, soluble oil, wheel abrator grit, and incinerator baghouse dust. On July 13, 1987, an employee of Rockford Products visited the Rockford Regional IEPA Office to report that from 1970-1975 he was personally involved in a routine dumping of cyanide sludge that was disposed in the on-site landfill. Rockford Products claims that during 1978, a clean-up of all obtainable drums was undertaken and removed from the site. However, there are no records to verify this.

Additional waste management activity and releases at the site that are not RCRA regulated include: previous on-site incineration (Brule Incinerator) of waste oil stored in three underground storage tanks (P, Q & R); roll-off box storage of pretreatment sludges contaminated with cyanide and cadmium, and a release from a 1,1,1-Trichloroethane product tank that occurred on February 5, 1986 during a filling operation. Approximately 50 to 100 gallons of solvent was released onto the roof which eventually drained into an open ditch outside the plant property via storm sewer (see Figure 2-4).

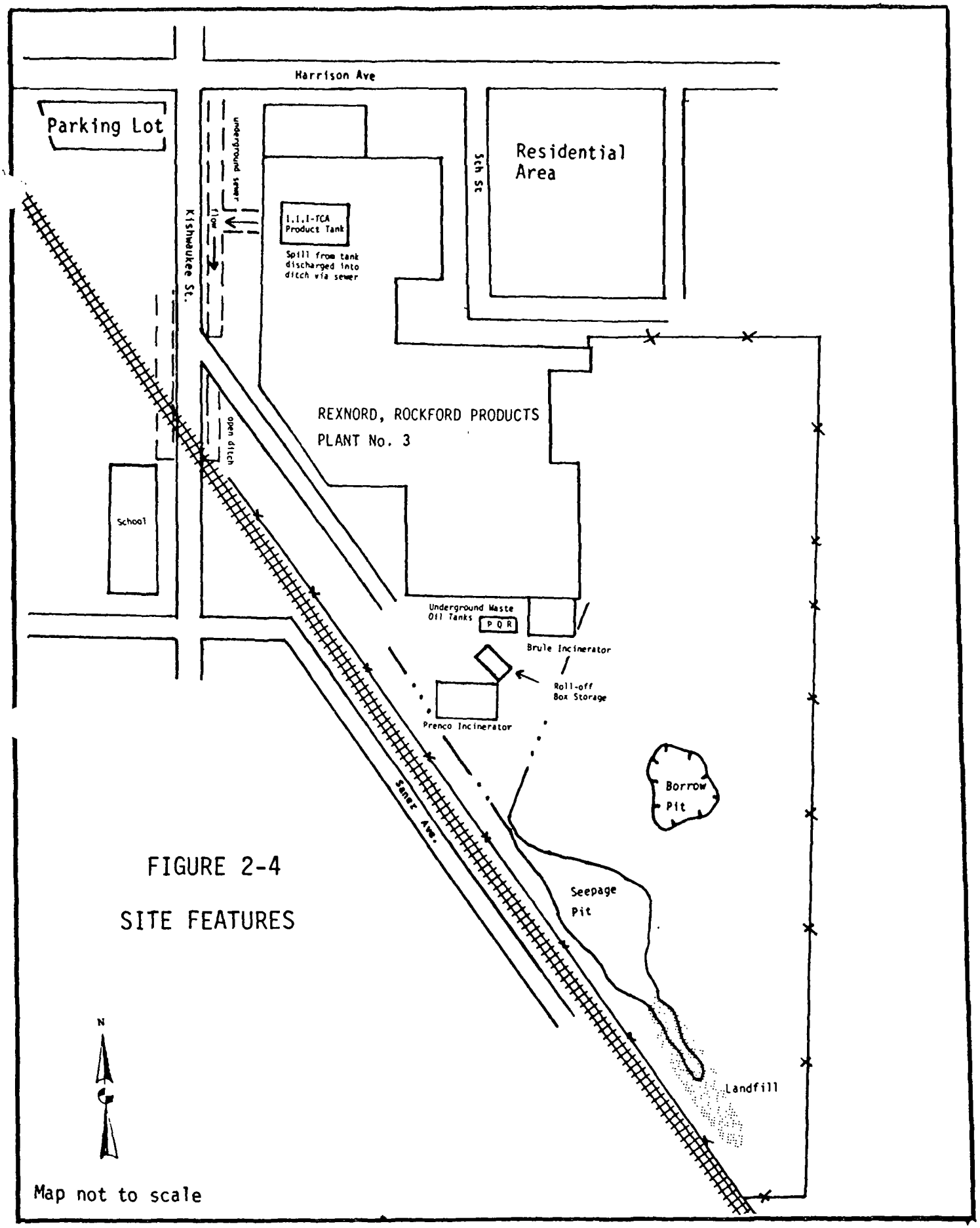


FIGURE 2-4

SITE FEATURES

Source: IEPA, 1989

3. SCREENING SITE INSPECTION PROCEDURES AND FIELD OBSERVATIONS

3.1 INTRODUCTION

This section outlines procedures and observations of the SSI at Rexnord, Inc., Rockford Products Plant #3. Individual subsections address the site representative interview, reconnaissance inspection and sampling procedures. The SSI was conducted in accordance with the USEPA-approved workplan.

The USEPA Potential Hazardous Waste Site Inspection Report (Form 2070-13) for the Rockford Products Plant #3 site is provided in Appendix C.

3.2 SITE REPRESENTATIVE INTERVIEW

On August 9, 1989, IEPA personnel conducted an interview with Rockford Products Corporation officials. The IEPA was represented by John Morgan and Tom Crause. Rockford Products Corporation was represented by Louis M. Rundio, Jr., Attorney, David P. Peterson, Vice President, Jim Hartman, Director of Engineering, and Roy Morris, Manager of Plant Facilities.

Discussion during the interview included the nature of the Pre-remedial CERCLA program, proposed sampling locations, and the future disposition of the seepage pit. Rockford Products agreed to all the proposed sampling locations in the workplan except for a soil sample location designated for a waste oil stain observed April 15, 1986 during a IEPA field inspection. According to the field inspection report dated May 23, 1986, a 75 ft. x 75 ft. area was affected.

Rockford Products Corporation relies on the seepage pit for the collection of storm water run-off and non-contact cooling water because Rockford's current sewer system is at a higher elevation than Rockford Products property. According to Mr. Morris, a new sewer system is currently being constructed by the City of Rockford and will replace the use of the seepage pit when completed next year.

3.3 RECONNAISSANCE INSPECTION

A request by IEPA to conduct an on-site reconnaissance inspection prior to the preparation of the workplan was denied by Rockford Products Corporation. Therefore, an off-site reconnaissance inspection was conducted on August 9, 1989.

Reconnaissance Inspection Observations. The Rockford Products Corporation Plant #3 is located at the intersection of Harrison and Kishwaukee on 27 acres of land in the southeast part of Rockford. The site is surrounded by a secure fence and is bordered on the west by a railroad and a school, to the northeast by a residential area, with the remaining land use being primarily industrial with scattered residential areas and commercial developments.

3.4 SAMPLING PROCEDURES

Samples were collected by IEPA personnel to determine levels of USEPA Target Compound List (TCL) at the site. The TCL is provided in Appendix D.

On August 16-17, 1989, IEPA personnel collected seven soil, eight groundwater and one surface water sample (see Figure 3-1). Fehr-Graham & Associates, Consultants from Freeport, Illinois, represented Rockford Products Corporation during the site inspection and split all on-site samples with the IEPA.

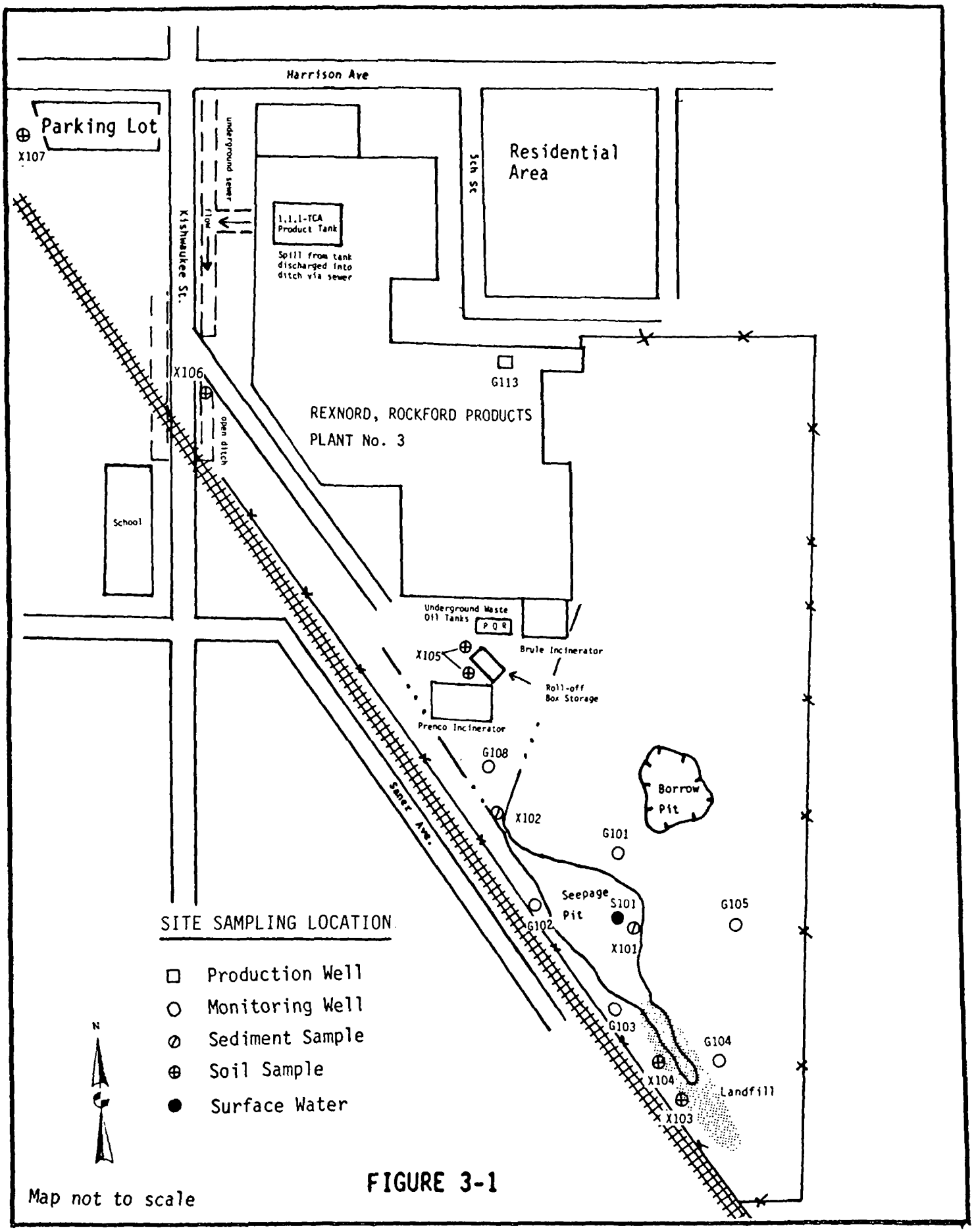


FIGURE 3-1

Source: IEPA,1989

Soil Sampling Procedures. The seven soil samples were taken to determine the impact past industrial operations at Rockford Products Corporation have had on the surrounding environment. X101 was a sediment sample collected from the east side of the seepage pit located approximately 12 feet from the shore line. X102 was a sediment sample collected from the intersection of the two drainage ditches that discharge into the northern portion of the seepage pit. X103 and X104 were subsurface soil samples collected from the west portion of the alleged landfill area. X103 was collected from a depth of 6.5-7.0 feet. X104 was collected from a depth of 6.0-6.5 feet. The proposed depths of 10-12 feet for X103 and X104 could not be reached due to the borings caving-in from seepage pit water. X105 was a composite sample collected from the north and west sides of the roll-off box. The depths of the samples were from 0-1.5 feet. During the collection of the sample (X105) on the west side of the roll-off box, a dark sludge like material was encountered at a depth of approximately 1-1.5 feet. X106 was a sediment sample collected from the open ditch located on the west side of the facility. The open ditch was believed to be affected by the 1,1,1-trichloroethane spill that occurred on February 5, 1986. X107 was collected as a background sample located on property owned by Rockford Products Corporation that appeared not to be affected by past industrial activity.

The sediment samples were collected with a teflon extended arm sampler. The soil samples were collected with stainless steel spoons and augers. All samples were transferred directly into the sample jars and were evidence taped and packaged in accordance with USEPA required procedures.

Groundwater Samples Procedures. Eight groundwater samples were collected to determine the impact past industrial activities at Rockford Products Corporation are having on the underlying groundwater. Six of eleven of Rockford Products Corporation's monitor wells (G101, G102, G103, G104, G105 and G108), an on-site production well (G113), and an off-site Mobile Home Park well (G201) were sampled during the SSI. See Appendix E for well logs and a map illustrating the distribution of all on-site monitor wells. The American Mobile Home Park well is located at 1418 Sandy Hollow Road and was selected as a representative background sample (see Figure 3-2).

The monitor wells sampled during the SSI had five well volumes of water purged, with pH, conductivity and temperature measured before purging and prior to sample collection. The wells were purged and sampled with a three foot teflon bailer and nylon cord. Total metals were field filtered with a Masterflex variable speed peristaltic pump. After sample collection, the bottles were dried, preservatives added to the appropriate bottles, evidence taped and packaged in accordance with USEPA approved procedures.

Surface Water Sampling Procedures. Sample designation S101 was collected from the east side of the seepage pit approximately 25 feet from the shore line. A Lab-Line Instruments, Inc., Water Sampler with an attached nylon cord was used to collect the sample. The weighted water sampler was thrown from the edge of the shore line to a designated area in the seepage where it was allowed to sink prior to sample collection. Once the bottle was filled, it was retrieved by the nylon cord, and the process was repeated until all sample bottles were filled. After sample collection, the bottles were dried,

preservatives added to the appropriate bottles, evidence taped and packaged in accordance with USEPA approved procedures. All samples were analyzed for the TCL by ARDL in Mt. Vernon, Illinois.

Decontamination Procedures. Standard Illinois Environmental Protection Agency decontamination procedures were followed prior to the collection of all samples. The procedures included the scrubbing of all equipment with a non-foaming trisodium phosphate solution, rinsing with hot tap water, rinsing with acetone, rinsing with hot tap water again and final rinsed with distilled water. All equipment is air dried, then wrapped and stored in heavy duty alumium foil for transport to the field.

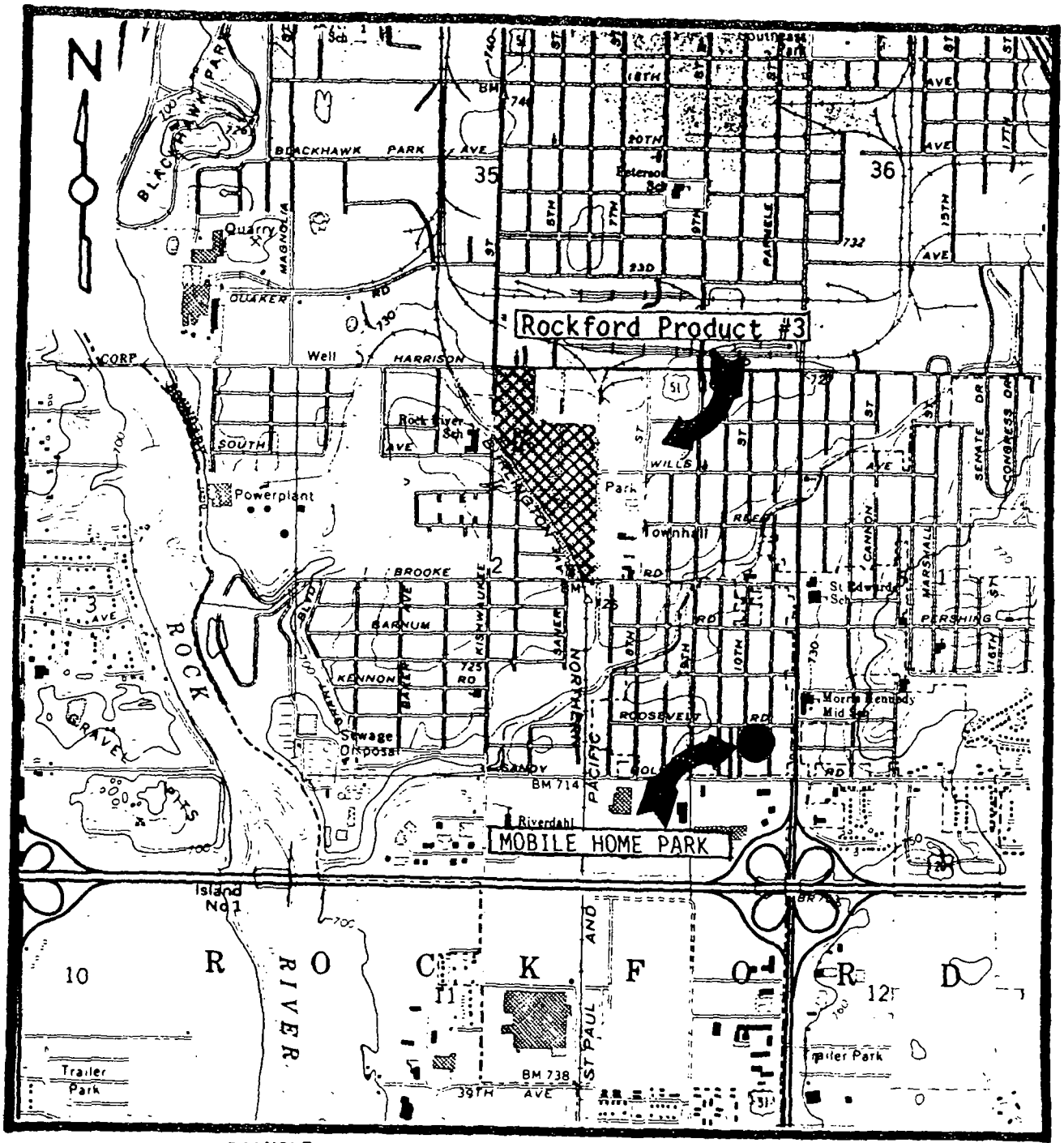


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FIGURE 3-2

4. ANALYTICAL RESULTS

4.1 INTRODUCTION

This section includes the analytical results of Target Compound List compounds from IEPA collected samples at the Rockford Products Corporation facility.

4.2 ANALYTICAL RESULTS FROM IEPA COLLECTED SAMPLES

Chemical analysis of groundwater, soil and surface water samples collected by IEPA personnel revealed the following substances: volatiles, semi-volatiles, heavy metals, common inorganic constituents and laboratory artifacts (see Table 4-1 for a summary of the chemical analysis results).

Soil samples X101, X102, X103 and X104, groundwater samples G103, G104 and G113, and surface water sample S101 contained quantifiable levels of volatile contaminants. Groundwater sample G101 contained quantifiable levels of volatiles and heavy metals. G108 contained heavy metals above background. Soil sample X106, which was collected from the open ditch connected to Rockford's storm sewer system, contained quantifiable levels of heavy metals and signficantly high levels of semi-volatiles. Soil sample X105 detected quantifiable levels of cyanide above background. Well G201 and soil sample X107 were selected as representative background samples.

REYNORD, ROCKFORD PRODUCTS COMPANY
ILD 005212097

TABLE 4-1
SUMMARY

SAMPLING POINT	S 101	X 101	X 102	X 103	X 104	X 105	X 106	X 107	G 101	G 102	G 103	G 104	G 105	G 108	G 113	G 201	BLANK
PARAMETER	8-16-89	8-16-89	8-16-89	8-16-89	8-16-89	8-16-89	8-16-89	8-16-89	8-16-89	8-16-8	8-16-8	8-16-8	8-16-8	8-16-8	8-16-89	8-16-89	8-16-89
VOLATILES (ppb)																	
Chloromethane	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Bromomethane	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Vinyl Chloride	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chloroethane	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methylene Chloride	15.0	35.0	54.0	14.0	16.0	27.0	32.0	--	--	25.0 J	--	11.0 B	22.0 J	--	--	--	11.0 B
Acetone	--	32.0 J	31.0 J	--	17.0 J	20.0 J	50.0 J	23.0 J	--	69.0	--	48.0	70.0	--	--	--	--
Carbon Disulfide	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1-Dichloroethene	46.0 J	--	--	--	--	--	--	--	--	--	7.0	--	--	--	70.0	--	--
1,1-Dichloroethane	43.0	8.0	9.0	--	--	--	--	--	12.0	--	9.0	8.0	--	--	65.0	--	--
1,2-Dichloroethene(total)	44.0	--	--	--	--	--	--	--	7.0	--	8.0	6.0	--	--	61.0	--	--
Chloroform	--	--	6.0 J	--	--	--	10.0	11.0	--	--	--	--	--	--	--	--	--
1,2-Dichloroethane	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Butanone (MEK)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1,1-Trichloroethane	75.0	44.0	70.0	23.0	--	--	--	--	11.0	--	14.0	10.0	--	--	130.0	--	--
Carbon Tetrachloride	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Vinyl Acetate	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Bromodichloromethane	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichloropropane	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
cis-1,3-Dichloropropene	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Trichloroethene	26.0	--	--	--	--	7.0	--	--	5.0	--	8.0	5.0 J	--	--	50.0	--	--
Dibromochloromethane	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1,2-Trichloroethane	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzene	--	--	--	16.0	--	--	--	--	--	--	--	--	--	--	--	--	--
Trans-1,3-Dichloropropene	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Bromoform	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Methyl-2-Pentanone	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Hexanone	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Tetrachloroethene	6.0	--	--	--	--	4.0 J	--	--	--	--	--	--	--	--	13.0	--	--
Toluene	--	--	--	30.0	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1,2,2-Tetrachloroethane	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chlorobenzene	--	--	--	--	--	--	--	--	--	--	2.0 J	--	--	--	--	--	--
Ethylbenzene	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Styrene	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Xylene (o&p)	--	13.0 J	--	13.0 J	--	--	--	--	--	--	--	--	--	--	--	--	--
xylene (m)				12.0						--	--	--	--	--	--	--	--
SEMIVOLATILES (ppb)																	
Phenol	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
bis(2-Chloroethyl) ether	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Chlorophenol	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichlorobenzene	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,4-Dichlorobenzene	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzyl Alcohol	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichlorobenzene	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Methylphenol	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

REXNORD,ROCKFORD PRODUCTS COMPAMY
ILD 005212097

TABLE 4-1
SUMMARY

SAMPLING POINT	S 101	X 101	X 102	X 103	X 104	X 105	X 106	X 107	G 101	G 102	G 103	G 104	G 105	G 108	G 113	G 201	BLANK
	8-16-89	8-16-89	8-16-89	8-16-89	8-16-89	8-16-89	8-16-89	8-16-89	8-16-89	8-16-8	8-16-8	8-16-8	8-16-8	8-16-8	8-16-89	8-16-89	8-16-89
PARAMETER																	
Beryllium	--	--	--	--	--	--	--	0.1	13.0	3.0	2.0	2.0	--	--	--	--	--
Cadmium	--	--	2.0	--	--	6.3	1.4	--	20.0	--	--	--	--	--	--	--	--
Calcium	103000.0	9700.0	24000.0	28000.0	45000.0	30000.0	49000.0	3000.0	76000.0	87000.0	58000.0	110000.0	70000.0	63000.0	100000.0	92000.0	--
Chromium	--	8.9	14.0	4.9	6.5	41.0	290.0	18.0	46.0	--	--	--	--	710.0	--	--	--
Cobalt	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Copper	21.0	12.0	49.0	6.3	8.4	22.0	66.0	11.0	43.0	20.0	--	--	--	--	--	--	--
Iron	--	3400.0	3100.0	1800.0	2200.0	11000.0	5400.0	11000.0	790.0	80.0	--	--	--	1900.0	--	--	--
Lead	--	8.9	37.0	2.2	3.0	22.0	540.0	23.0	5.1	2.0	1.0	1.8	1.6	5.9	--	1.1	--
Magnesium	40000.0	4100.0	5100.0	10000.0	18000.0	15000.0	25000.0	1600.0	31000.0	32000.0	26000.0	35000.0	23000.0	24000.0	40000.0	39000.0	--
Manganese	--	28.0	34.0	74.0	77.0	370.0	78.0	460.0	33.0	14.0	--	--	--	98.0	--	--	--
Mercury	--	--	--	--	--	--	0.3	--	--	--	--	--	--	--	--	--	--
Nickel	--	--	--	--	--	--	--	--	73.0	--	--	37.0	--	110.0	--	--	--
Potassium	2200.0	130.0	120.0	64.0	92.0	590.0	110.0	730.0	1400.0	3500.0	1500.0	2100.0	930.0	2300.0	2500.0	1400.0	--
Selenium	--	--	--	--	--	--	--	--	--	--	--	5.9	--	--	--	--	--
Silver	17000.0	--	--	--	--	--	--	--	25.0	11.0	--	10.0	--	--	10.0	--	--
Sodium	--	89.0	100.0	150.0	160.0	150.0	390.0	59.0	9000.0	12000.0	8300.0	17000.0	7400.0	7400.0	17000.0	32000.0	--
Thallium	--	--	--	--	--	--	--	--	3.0	--	--	--	--	--	--	--	--
Vanadium	--	5.7	4.6	--	--	19.0	4.3	28.0	20.0	--	--	--	--	--	--	--	--
Zinc	22.0	67.0	140.0	28.0	14.0	200.0	190.0	62.0	40.0	--	--	--	--	--	--	25.0	--
Cyanide	--	--	--	--	--	5.2	3.3	--	--	--	--	--	--	--	--	--	--
Sulfate	60000.0	270.0	160.0	220.0	250.0	41.0	100.0	47.0	36000.0	60000.0	27000.0	53000.0	14000.0	20000.0	58000.0	34000.0	--
Sulfide	--	300.0	520.0	190.0	180.0	78.0	510.0	250.0	--	--	--	--	--	--	--	--	--
TEMPERATURE									70.6	--	69.5	53.8	55.3	61.9	55.9	53.8	--
SP. COND.(umhos)									0.6	--	0.6	1.0	0.7	0.5	0.9	0.9	--
PH									7.6	--	7.9	7.7	7.7	7.9	7.9	8.2	--

REXNORD,ROCKFORD PRODUCTS COMPAMY
ILD 005212097

TABLE 4-1
SUMMARY

[redacted]

SAMPLING POINT	S 101	X 101	X 102	X 103	X 104	X 105	X 106	X 107	G 101	G 102	G 103	G 104	G 105	G 108	G 113	G 201	BLANK
PARAMETER	8-16-89	8-16-89	8-16-89	8-16-89	8-16-89	8-16-89	8-16-89	8-16-89	8-16-89	8-16-8	8-16-8	8-16-8	8-16-8	8-16-8	8-16-89	8-16-89	8-16-89
bis(2-Chloroisopropyl)ether	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Methylphenol	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Nitroso-di-n-Dipropylamine	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachloroethane	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrobenzene	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Isophorone	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Nitrophenol	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dimethylphenol	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzoic acid	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
bis(2Chloroethoxy) Methane	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dichlorophenol	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,4-Trichlorobenzene	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Naphthalene	--	--	--	--	--	--	25000.0 JD	--	--	--	--	--	--	--	--	--	--
4-Chloroaniline	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorobutadiene	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chloro-3-Methylphenol	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Methylnaphthalene	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorocyclopentadiene	--	--	--	--	--	--	6100.0 JD	--	--	--	--	--	--	--	--	--	--
2,4,6-Trichlorophenol	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4,5-Trichlorophenol	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Chloronaphthalene	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Nitroaniline	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dimethylphthalate	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Acenaphthylene	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,6-Dinitrotoluene	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3-Nitroaniline	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Acenaphthene	--	--	--	--	--	--	57000.0 D	--	--	--	--	--	--	--	--	--	--
2,4-Dinitrophenol	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Nitrophenol	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dibenzofuran	--	--	--	--	--	--	35000.0 JD	--	--	--	--	--	--	--	--	--	--
2,4-Dinitrotoluene	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Diethylphthalate	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chlorophenyl-phenyl ether	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Fluorene	--	--	--	--	--	--	50000.0 D	--	--	--	--	--	--	--	--	--	--
4-Nitroaniline	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4,6-Dinitro-2-Methylphenol	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Nitrosodiphenylamine	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Bromophenyl-phenylether	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorobenzene	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pentachlorophenol	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Phenanthrene	--	--	--	--	--	--	380000.0 DJ	--	--	--	--	--	--	--	--	--	--
Anthracene	--	--	--	--	--	--	540000.0 DJ	--	--	--	--	--	--	--	--	--	--
Di-n-Butylphthalate	--	--	--	--	--	--	48000.0 UD	--	--	--	--	--	--	--	--	--	--
Fluoranthene	--	--	--	--	--	--	400000.0 DJ	--	--	--	--	--	--	--	--	--	--
Pyrene	--	--	--	--	--	--	340000.0 DJ	74.0 J	--	--	--	--	--	--	--	--	--
Butylbenzylphthalate	--	--	--	--	--	--	48000.0 DJ	--	--	--	--	--	--	--	--	--	--
3,3'-Dichlorobenzidine	--	--	--	--	--	--	96000.0 DJ	--	--	--	--	--	--	--	--	--	--
Benzo(a)anthracene	--	--	--	--	--	--	120000.0 DJ	--	--	--	--	--	--	--	--	--	--

REXNORD,ROCKFORD PRODUCTS COMPANY
ILD 005212097

TABLE 4-1
SUMMARY

SAMPLING POINT	S 101	X 101	X 102	X 103	X 104	X 105	X 106	X 107	G 101	G 102	G 103	G 104	G 105	G 108	G 113	G 201	BLANK
PARAMETER	8-16-89	8-16-89	8-16-89	8-16-89	8-16-89	8-16-89	8-16-89	8-16-89	8-16-89	8-16-8	8-16-8	8-16-8	8-16-8	8-16-8	8-16-89	8-16-89	8-16-89
Chrysene	--	--	--	--	--	--	150000.0 DJ	--	--	--	--	--	--	--	--	--	--
bis(2-Ethylhexyl)phthalate	--	--	--	240.0 J	--	280.0 J	48000.0 DJ	270.0 J	3.0 J	--	1.0 J	1.0 J	--	--	--	--	--
Di-n-Octylphthalate	--	--	--	--	--	--	48000.0 DJ	--	--	--	--	--	--	--	--	--	--
Benzo(b)fluoranthene	--	--	--	--	--	--	110000.0 DJ	--	--	--	--	--	--	--	--	--	--
Benzo(k)fluoranthene	--	--	--	--	--	--	60000.0 DJ	--	--	--	--	--	--	--	--	--	--
Benzo(a)pyrene	--	--	--	--	--	--	120000.0 DJ	--	--	--	--	--	--	--	--	--	--
Indeno(1,2,3-cd)pyrene	--	--	--	--	--	--	110000.0 DJ	--	--	--	--	--	--	--	--	--	--
Dibenz(a,h)anthracene	--	--	--	--	--	--	48000.0 DJ	--	--	--	--	--	--	--	--	--	--
Benzo(g,h,i)perylene	--	--	--	--	--	--	100000.0 DJ	--	--	--	--	--	--	--	--	--	--
PESTICIDES (ppb)																	
alpha-BHC	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
beta-BHC	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
delta-BHC	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
gamma-BHC (Lindane)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Heptachlor	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aldrin	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Heptachlor epoxide	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Endosulfan I	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dieldrin	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4,4'-DDE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Endrin	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Endosulfan II	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4,4'-DDD	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Endosulfan sulfate	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4,4'-DDT	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methoxychlor (Mariate)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Endrin Ketone	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
alpha-Chlorodane	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
gamma-Chlorodane	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Toxaphene	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1016	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1221	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1232	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1242	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1248	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1254	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1260	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
INORGANICS (soil samples ppm..water samples ppb)																	
Aluminum	230.0 J	2700.0	1800.0	920.0	830.0	7800.0	2100.0	120000.0	670.0	--	--	--	--	850.0	--	--	--
Antimony	--	--	11.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Arsenic	--	--	--	--	--	1.7	2.1	3.6	--	--	--	--	--	--	--	--	--
Barium	--	--	45.0	--	--	94.0	38.0	130.0	--	--	--	--	--	--	--	--	--

QUALIFIER	DEFINITION
U	Indicates element or compound was analyzed for but not detected. Report the detection limit value (e.g., 10U).
J	Indicates an estimated value. This flag is used either when estimating a concentration for TIC's where a 1:1 response is assumed, or when the mass spectral data indicate the presence of a compound that meets the identification criteria but the result is less than the CRDL.
C	This flag applies to pesticide results where the identification has been confirmed by GC/MS. Single component pesticides greater than or equal to 10 ng/ul in the final extract shall be confirmed by GC/MS.
B	This flag is used when the analyte is found in the blank as well as the sample. This flag must be used for a TIC as well as for a positively identified TCL compound.
D	This flag identifies all compounds identified in an analysis at a secondary dilution factor. If a sample or extract is re-analyzed at a higher dilution factor, as in the "E" flag above, the "DL" suffix is appended to the sample numbers (both lab and EPA) on the Form 1 for the diluted sample, and all concentration values reported on that Form 1 are flagged with the "D" flag.
E	This flag identifies compounds whose concentrations exceed the calibration range of the instrument for that specific analysis. If one or more compounds have a response greater than full scale, the sample or extract must be diluted and re-analyzed. All such compounds with a response greater than full scale should have the concentration flagged with an "E" on the Form 1 for the original analysis. If the dilution

QUALIFIER	DEFINITION
	of the extract causes any compounds identified in the first analysis to be below the calibration range in the secor analysis, then the results of both analyses shall be reported on separate Forms 1. The Form 1 for the diluted sample shall have the "DL" suffix appended to the lab sample number and the EPA sample number.
S	Indicates value determined by Method of Standard Addition.
N	Indicates spike sample recovery is not within control limits.
*	Indicates duplicate analysis is not within control limits.
+	Indicates the correlation coefficient for method of standard addition is less than 0.995.

5. DISCUSSION OF MIGRATION PATHWAYS

5.1 INTRODUCTION

This section discusses data and information generated during the SSI that applies to potential migration pathways and targets at risk.

The four migration pathways discussed in the subsections include groundwater, surface water, air and on-site exposure.

5.2 GROUNDWATER

Results from groundwater samples collected from on-site monitor wells and a production well indicate an observed release to groundwater has occurred. The potential on-site sources that may be contributing to the groundwater contamination at the site include the abandoned landfill, contaminated soils from past spills, alleged releases from underground storage tanks, the seepage pit and non-contact cooling water from the on-site production well that is discharged into the seepage pit.

Samples collected during the SSI from the production well, seepage pit and on-site soils contained quantifiable levels of volatile organic compounds similar to contaminants detected in the groundwater samples collected from on-site monitor wells (1,1,1-trichloroethane, trichloroethene and tetrachloroethene).

The boring logs generated during the installation of on-site monitor wells indicate the soils in the unsaturated zone (vadose zone) consist primarily of

sand with trace amounts of gravel. The permeability associated with sandy soil deposits combined with the low k_{oc} value of the volatile organic compounds detected in the soils and seepage pit would facilitate the migration of contaminants from the vadose zone to the groundwater. The organic partition coefficient (k_{oc}) indicates the tendency of an organic chemical to be absorbed by soils and is a significant environmental fate determinant for all exposure pathways, especially aqueous pathway (EPA, 1986).

The shallow sand and gravel aquifer, which is at an average depth of 41 feet beneath the Rockford Products site, serves as a primary source of drinking water for the residents of Rockford (population: 139,712) and several local mobile home parks and subdivisions located within the 4-mile radius of the site. The closest public water supply well obtaining water from the shallow sand and gravel aquifer is Rockford Public Well #35 located approximately 3,000 feet southeast of the site. This section is underlain by the Galena-Platteville Dolomite, followed by the Glenwood and St. Peter Sandstones, all of the Ordovician system. Each of these members are hydraulically interconnected and serves a regional or local aquifers. The closest bedrock well to the site is Rockford Public Well 7A located approximately 2,500 feet northeast of the site (see Appendix F for PWS well locations).

5.3 SURFACE WATER

The Rock River is located approximately 3/4 mile west of Rockford Products. The potential for off-site migration of contaminants to the Rock River via overland surface drainage is restricted due to the closed topography

conditions on Rockford Products property. Contaminants detected in the open ditch (sample X106) connected to the storm sewer located on the west side of Rockford Products may eventually be discharged into the Rock River. Further sampling of the storm sewer system must be conducted to determine it's significance as a migration pathway and to determine if the detected contaminants can be attributed to the site.

Although no surface water intakes for the purpose of drinking water supplies exist within the 15 mile downstream area of concern, the Rock River is used for recreational (fishing, boating, etc.) purposes.

5.4 AIR

No documented releases to the air were observed during the SSI. A photo-ionization detector (HNU) with an 11.7 eV lamp and a hydrogen cyanide meter were used to monitor ambient air concentrations during the SSI.

Because of the highly volatile nature of the contaminants detected in the seepage pit, the potential for an air release via volatilization does exist at Rockford Products Corporation. The majority of the residents of Rockford (population: 139,712) live within the 4-mile radius of concern. The closest population affected by a potential air release would be on-site workers and residential areas that border the site to the northeast and southwest, located approximately 1,000 feet from the seepage pit.

5.5 ON-SITE EXPOSURE

Samples collected from the seepage pit (S101) and on-site soils (X105) indicate the presence of contaminants within the upper 1.5 feet of the

surface. The potential for on-site exposure through worker contact with contaminants does exist. Rockford Products Corporation employees approximately 900 workers.

Access to the site from the surrounding property is restricted by a secure fence and a 24-hour security guard.

The potential exists for direct contact exposure from the contaminants detected in the open ditch (X106)on the west side of the property. There are no access restrictions at the ditch to prevent public contact with the contaminants. A school is located across the street from the ditch.

JM:kja:3338k/sp/1-15

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JM:tk:4/40/28(9/28/89)

APPENDIX A

GROUNDWATER 4-MILE RADIUS MAP

SDMS US EPA Region V

Imagery Insert Form

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4-MILE RADIUS MAP

☐ **Other:**

APPENDIX B

SURFACE WATER ROUTE MAP

SDMS US EPA Region V

Imagery Insert Form

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15-MILE SURFACE WATER MAP

☐ **Other:**

APPENDIX C

USEPA FORM 2070-13

Site Inspection Report

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 5 - WATER, DEMOGRAPHIC, AND ENVIRONMENTAL DATA

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
ILD	005212097

VI. ENVIRONMENTAL INFORMATION

01 PERMEABILITY OF UNSATURATED ZONE (Check one)

☐ A $10^{-6} - 10^{-8}$ cm/sec ☐ B $10^{-4} - 10^{-6}$ cm/sec ☐ C $10^{-4} - 10^{-3}$ cm/sec ☒ D GREATER THAN 10^{-3} cm/sec

02 PERMEABILITY OF BEDROCK (Check one)

☐ A IMPERMEABLE (Less than 10^{-6} cm/sec) ☐ B RELATIVELY IMPERMEABLE ($10^{-4} - 10^{-6}$ cm/sec) ☒ C RELATIVELY PERMEABLE ($10^{-2} - 10^{-4}$ cm/sec) ☐ D VERY PERMEABLE (Greater than 10^{-2} cm/sec)

03 DEPTH TO BEDROCK	04 DEPTH OF CONTAMINATED SOIL ZONE	05 SOIL pH	
UNKNOWN (ft)	UNKNOWN (ft)	UNKNOWN	

06 NET PRECIPITATION	07 ONE YEAR 24 HOUR RAINFALL	08 SLOPE: SITE SLOPE	DIRECTION OF SITE SLOPE	TERRAIN AVERAGE SLOPE
3 (in)	2.5 (in)	0 %	0	0 %

09 FLOOD POTENTIAL

SITE IS IN N/A YEAR FLOODPLAIN

10 ☐ SITE IS ON BARRIER ISLAND, COASTAL HIGH HAZARD AREA, RIVERINE FLOODWAY

11 DISTANCE TO WETLANDS (5 acre minimum)

ESTUARINE: A N/A (mi) OTHER: B N/A (mi)

12 DISTANCE TO CRITICAL HABITAT (of endangered species)

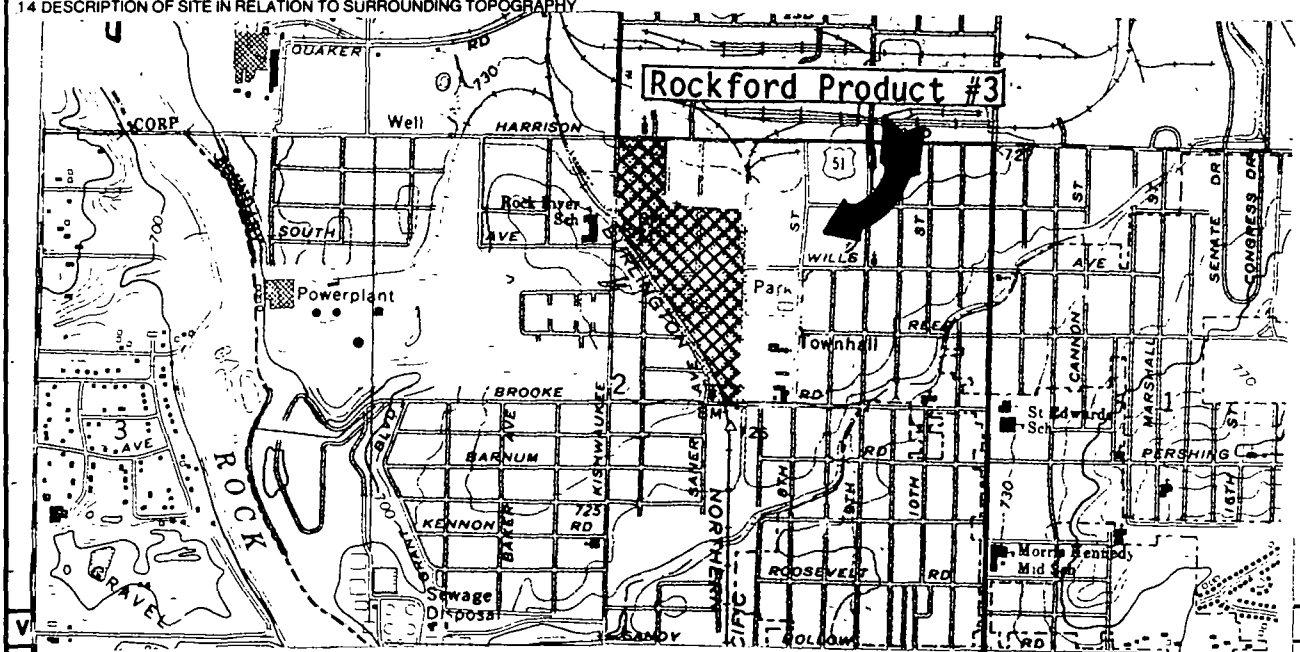
N/A (mi)

ENDANGERED SPECIES _____

13 LAND USE IN VICINITY

DISTANCE TO COMMERCIAL/INDUSTRIAL	RESIDENTIAL AREAS, NATIONAL/STATE PARKS, FORESTS, OR WILDLIFE RESERVES	AGRICULTURAL LANDS PRIME AG LAND	AG LAND
A .10 (mi)	B .10 (mi)	C N/A (mi)	D. N/A (mi)

14 DESCRIPTION OF SITE IN RELATION TO SURROUNDING TOPOGRAPHY



EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 7 - OWNER INFORMATION

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
ILD	005212097

II. CURRENT OWNER(S) / PARENT COMPANY (If applicable)

Current Owner			Parent Company		
01 NAME: Rockford Products Corporation		02 D+B NUMBER:	08 NAME: — SAME —		09 D+B NUMBER:
03 STREET ADDRESS (P O Box, RFD #, etc): 707 HARRISON Ave		04 SIC CODE:	10 STREET ADDRESS (P O Box, RFD #, etc): "		11 SIC CODE:
05 CITY: Rockford	06 STATE: IL	07 ZIP CODE: 61108-7197	12 CITY: "	13 STATE:	14 ZIP CODE:
01 NAME: N/A		02 D+B NUMBER:	08 NAME:		09 D+B NUMBER:
03 STREET ADDRESS (P O Box, RFD #, etc):		04 SIC CODE:	10 STREET ADDRESS (P O Box, RFD #, etc):		11 SIC CODE:
05 CITY:	06 STATE:	07 ZIP CODE:	12 CITY:	13 STATE:	14 ZIP CODE:
01 NAME: N/A		02 D+B NUMBER:	08 NAME:		09 D+B NUMBER:
03 STREET ADDRESS (P O Box, RFD #, etc):		04 SIC CODE:	10 STREET ADDRESS (P O Box, RFD #, etc):		11 SIC CODE:
05 CITY:	06 STATE:	07 ZIP CODE:	12 CITY:	13 STATE:	14 ZIP CODE:
01 NAME: N/A		02 D+B NUMBER:	08 NAME:		09 D+B NUMBER:
03 STREET ADDRESS (P O Box, RFD #, etc):		04 SIC CODE:	10 STREET ADDRESS (P O Box, RFD #, etc):		11 SIC CODE:
05 CITY:	06 STATE:	07 ZIP CODE:	12 CITY:	13 STATE:	14 ZIP CODE:

III. PREVIOUS OWNER(S) (List most recent first) / IV. REALTY OWNER(S) (If applicable, list most recent first)

Previous Owner			Realty Owner		
01 NAME: Rexnord, Inc.		02 D+B NUMBER:	01 NAME: N/A		02 D+B NUMBER:
03 STREET ADDRESS (P O Box, RFD #, etc): 707 HARRISON Ave		04 SIC CODE:	03 STREET ADDRESS (P O Box, RFD #, etc):		04 SIC CODE:
05 CITY: Rockford	06 STATE: IL	07 ZIP CODE: 61108-7197	05 CITY:	06 STATE:	07 ZIP CODE:
01 NAME:		02 D+B NUMBER:	01 NAME:		02 D+B NUMBER:
03 STREET ADDRESS (P O Box, RFD #, etc.):		04 SIC CODE:	03 STREET ADDRESS (P O Box, RFD #, etc):		04 SIC CODE:
05 CITY:	06 STATE:	07 ZIP CODE:	05 CITY:	06 STATE:	07 ZIP CODE:
01 NAME:		02 D+B NUMBER:	01 NAME:		02 D+B NUMBER:
03 STREET ADDRESS (P O Box, RFD #, etc.):		04 SIC CODE:	03 STREET ADDRESS (P O Box, RFD #, etc):		04 SIC CODE:
05 CITY:	06 STATE:	07 ZIP CODE:	05 CITY:	06 STATE:	07 ZIP CODE:

V. SOURCES OF INFORMATION (Cite specific references, e g , state files, sample analysis, reports)

Illinois EPA, Division of LAND, Springfield

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 9 - GENERATOR/TRANSPORTER INFORMATION

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
ILD	005212097

II. ON-SITE GENERATOR

01 NAME	02 D+B NUMBER
N/A	

03 STREET ADDRESS (P O Box, RFD #, etc)	04 SIC CODE
N/A	

05 CITY	06 STATE	07 ZIP CODE
N/A		

III. OFF-SITE GENERATOR(S)

01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER
N/A			
03 STREET ADDRESS (P O Box, RFD #, etc)	04 SIC CODE	03 STREET ADDRESS (P O Box, RFD #, etc)	04 SIC CODE
N/A			
05 CITY	06 STATE / 07 ZIP CODE	05 CITY	06 STATE / 07 ZIP CODE
N/A			
01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER
N/A			
03 STREET ADDRESS (P O Box, RFD #, etc)	04 SIC CODE	03 STREET ADDRESS (P O Box, RFD #, etc)	04 SIC CODE
N/A			
05 CITY	06 STATE / 07 ZIP CODE	05 CITY	06 STATE / 07 ZIP CODE
N/A			

IV. TRANSPORTER(S)

01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER
N/A			
03 STREET ADDRESS (P O Box, RFD #, etc)	04 SIC CODE	03 STREET ADDRESS (P O Box, RFD #, etc)	04 SIC CODE
N/A			
05 CITY	06 STATE / 07 ZIP CODE	05 CITY	06 STATE / 07 ZIP CODE
N/A			
01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER
N/A			
03 STREET ADDRESS (P O Box, RFD #, etc)	04 SIC CODE	03 STREET ADDRESS (P O Box, RFD #, etc)	04 SIC CODE
N/A			
05 CITY	06 STATE / 07 ZIP CODE	05 CITY	06 STATE / 07 ZIP CODE
N/A			

V. SOURCES OF INFORMATION *(Cite specific references, e g , state files, sample analysis, reports)*

N/A

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 10 - PAST RESPONSE ACTIVITIES

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
ILD	005212091

II PAST RESPONSE ACTIVITIES *(Continued)*

01 ☐ R BARRIER WALLS CONSTRUCTED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
N/A

01 ☐ S CAPPING/COVERING — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ T BULK TANKAGE REPAIRED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ U GROUT CURTAIN CONSTRUCTED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ V BOTTOM SEALED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ W GAS CONTROL — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ X FIRE CONTROL — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ Y LEACHATE TREATMENT — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ Z AREA EVACUATED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ 1 ACCESS TO SITE RESTRICTED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ 2 POPULATION RELOCATED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ 3 OTHER REMEDIAL ACTIVITIES — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

III. SOURCES OF INFORMATION *(Cite specific references, e g , state files, sample analysis, reports)*

N/A

APPENDIX D

TARGET COMPOUND LIST

TARGET COMPOUND LIST

Volatile Target Compounds

Compound	Water CRDL	Soil/Solid CRDL
1. chloromethane	10 ug/l	10 ug/kg
2. bromomethane	10	10
3. vinyl chloride	10	10
4. chloroethane	10	10
5. methylene chloride	5	5
6. acetone	10	10
7. carbon disulfide	5	5
8. 1,1-dichloroethene	5	5
9. 1,1-dichloroethane	5	5
10. t-1.2-dichloroethene	5	5
11. 1,2-dichloropropane	5	5
12. chloroform	5	5
13. 1,2-dichloroethane	5	5
14. 2-butanone	10	10
15. 1,1,1-trichloroethane	5	5
16. carbon tetrachloride	5	5
17. vinyl acetate	10	10
18. dichlorobromomethane	5	5
19. c-1,3-dichloropropene	5	5
20. trichloroethene	5	5
21. benzene	5	5
22. chlorodibromomethane	5	5
23. 1,1,2-trichloroethane	5	5
24. t-1,3-dichloropropene	5	5
25. 2-chloroethyl vinyl ether	10	10
26. bromoform	5	5
27. 2-hexanone	10	10
28. 4-methyl-2-pentanone	10	10
29. 1,1,2,2-tetrachloroethane	5	5
30. tetrachloroethene	5	5
31. toluene	5	5
32. chlorobenzene	5	5
33. ethylbenzene	5	5
34. styrene	5	5
35. total xylenes	15	15

CRDL - Contract Required Detection Limit

Base/Neutral Target Compounds

Compound		Water CRDL	Soil/Solid CRDL
1.	Hexachloroethane	10 ug/l	330 ug/kg
2.	Bis (2-chloroethyl) ether	10	330
3.	Benzyl Alcohol	10	330
4.	Bis (2-chloroisopropyl) ether	10	330
5.	N-nitrosodi-n-propylamine	10	330
6.	Nitrobenzene	10	330
7.	Hexachlorobutadiene	10	330
8.	2-Methylnaphthalene	10	330
9.	1,2,4-trichlorobenzene	10	330
10.	Isophorone	10	330
11.	Naphthalene	10	330
12.	4-Chloroaniline	10	330
13.	Bis (2-chloroethoxy) methane	10	330
14.	Hexachlorocyclopentadiene	10	330
15.	2-chloronaphthalene	10	330
16.	2-Nitroaniline	50	1600
17.	Acenaphthylene	10	330
18.	3-Nitroaniline	50	1600
19.	Acenaphthene	10	330
20.	Dibenzofuran	10	330
21.	Dimethylphthalate	10	330
22.	2,6-Dinitrotoluene	10	330
23.	Fluorene	10	330
24.	4-Nitroaniline	50	1600
25.	4-Chlorophenyl-phenyl ether	10	330
26.	2,4-Dinitrotoluene	10	330
27.	Diethylphthalate	10	330
28.	N-Nitrosodiphenylamine	10	330
29.	Hexachlorobenzene	10	330
30.	Phenanthrene	10	330
31.	4-Bromophenyl-phenyl ether	10	330
32.	Anthracene	10	330
33.	Dibutylphthalate	10	330
34.	Fluoranthene	10	330
35.	Pyrene	10	330
36.	Butyl benzyl phthalate	10	330
37.	Bis (2-ethylhexyl) phthalate	10	330
38.	Chrysene	10	330
39.	Benzo (a) anthracene	10	330
40.	3,3'-Dichlorobenzidene	20	660
41.	Di-n-octyl phthalate	10	330
42.	Benzo (b) fluoranthene	10	330
43.	Benzo (k) fluoranthene	10	330
44.	Benzo (a) pyrene	10	330
45.	Indeno (1,2,3-cd) pyrene	10	330
46.	Dibenzo (a,h) anthracene	10	330
47.	Benzo (g,h,i) perylene	10	330
48.	1,2-Dichlorobenzene	10	330
49.	1,3-Dichlorobenzene	10	330
50.	1,4-Dichlorobenzene	10	330

Acid Target Compounds

Compound	Water CRDL	Soil/Solid CRDL
1. Benzoic Acid	50 ug/l	1600 ug/kg
2. Phenol	10	330
3. 2-chlorophenol	10	330
4. 2-nitrophenol	50	1600
5. 2-methylphenol	10	330
6. 2,4-dimethylphenol	10	330
7. 4-methylphenol	10	330
8. 2,4-dichlorophenol	10	330
9. 2,4,6-trichlorophenol	10	330
10. 2,4,5-trichlorphenol	50	1600
11. 4-chloro-3-methylphenol	10	330
12. 2,4-dinitrophenol	50	1600
13. 2-methyl-4,6-dinitrophenol	50	1600
14. Pentachlorophenol	50	1600
15. 4-nitrophenol	50	1600

Pesticide Target Compounds

Compound	Water CRDL	Soil/Solid CRDL
1. alpha-BHC	.05 ug/l	8.0 ug/kg
2. beta-BHC	.05	8.0
3. delta-BHC	.05	8.0
4. Lindane (gamma-BHC)	.05	8.0
5. Heptachlor	.05	8.0
6. Aldrin	.05	8.0
7. Heptachlor epoxide	.05	8.0
8. Endosulfan I	.05	8.0
9. 4,4'-DDE	.10	16.0
10. Dieldrin	.10	16.0
11. Endrin	.10	16.0
12. 4,4'-DDD	.10	16.0
13. Endosulfan II	.10	16.0
14. 4,4'-DDT	.10	16.0
15. Endrin aldehyde	.10	16.0
16. Endosulfan sulfate	.10	16.0
17. Methoxychlor	.50	80.0
18. Chlordane	.50	80.0
19. Toxaphene	.50	80.0
20. Arochlor-1016	1.0	160.0
21. Arochlor-1221	.50	80.0
22. Arochlor-1232	.50	80.0
23. Arochlor-1242	.50	80.0
24. Arochlor-1248	.50	80.0
25. Arochlor-1254	1.0	160.0
26. Arochlor-1260	1.0	160.0

Inorganic Target Compounds

Metals Analyses (CRDL)-ug/l*	
Aluminum	200
Antimony	60
Arsenic	10
Barium	200
Beryllium	5
Cadmium	5
Chromium	10
Cobalt	50
Copper	25
Iron	100
Lead	5
Manganese	15
Mercury	0.2
Nickel	40
Selenium	5
Silver	10
Thallium	10
Vanadium	50
Zinc	20

Other Inorganics
Cyanide
Sulfide
Phenols
Nitrogen-Ammonia
Nitrogen, Total Kjeldahl
Nitrogen-Nitrate
Boron
pH

*Any analytical method specified in the Quality Assurance Project Plan (QAPP) may be utilized as long as the documented instrument or method detection limits meet the Contract Required Detection Level requirements. Higher detection levels may only be used in the following circumstance:

If the sample concentration exceeds two times the detection limit of the instrument or method in use, the value may be reported even though the instrument or method detection limit may not equal the CRDL. This is illutrated in the example below:

For lead:

Method in use -- ICP
Instrument Detection Limit (IDL) = 40
Sample Concentration = 85
Contract Required Detection Level (CRDL) = 5

The value of 85 may be reported even though instrument detection limit is greater than required detection level. The instrument or method detection limit must be documented as described in Form IIIX.

These CRDL are the instrument detection limits obtained in pure water that must be met using ICP/Flame AA or Furnace AA. The detection limits for samples may be considerably higher depending on the sample matrix.

APPENDIX E

MONITOR WELL LOCATION MAP AND BORING LOGS

MONITORING WELL DATA
ROCKFORD PRODUCTS CORPORATION
PLANT NO. 3
ROCKFORD, ILLINOIS
NOVEMBER, 1986

PREPARED BY:
TESTING ENGINEERS, INC.
1417 CHICAGO AVENUE, P.O. BOX 548
DIXON, ILLINOIS 61021

RECEIVED
REGION 1 D.W.P.C.

DEC 19 1986

ENVIRONMENTAL PROTE[illegible]CY
STATE OF ILLINOIS

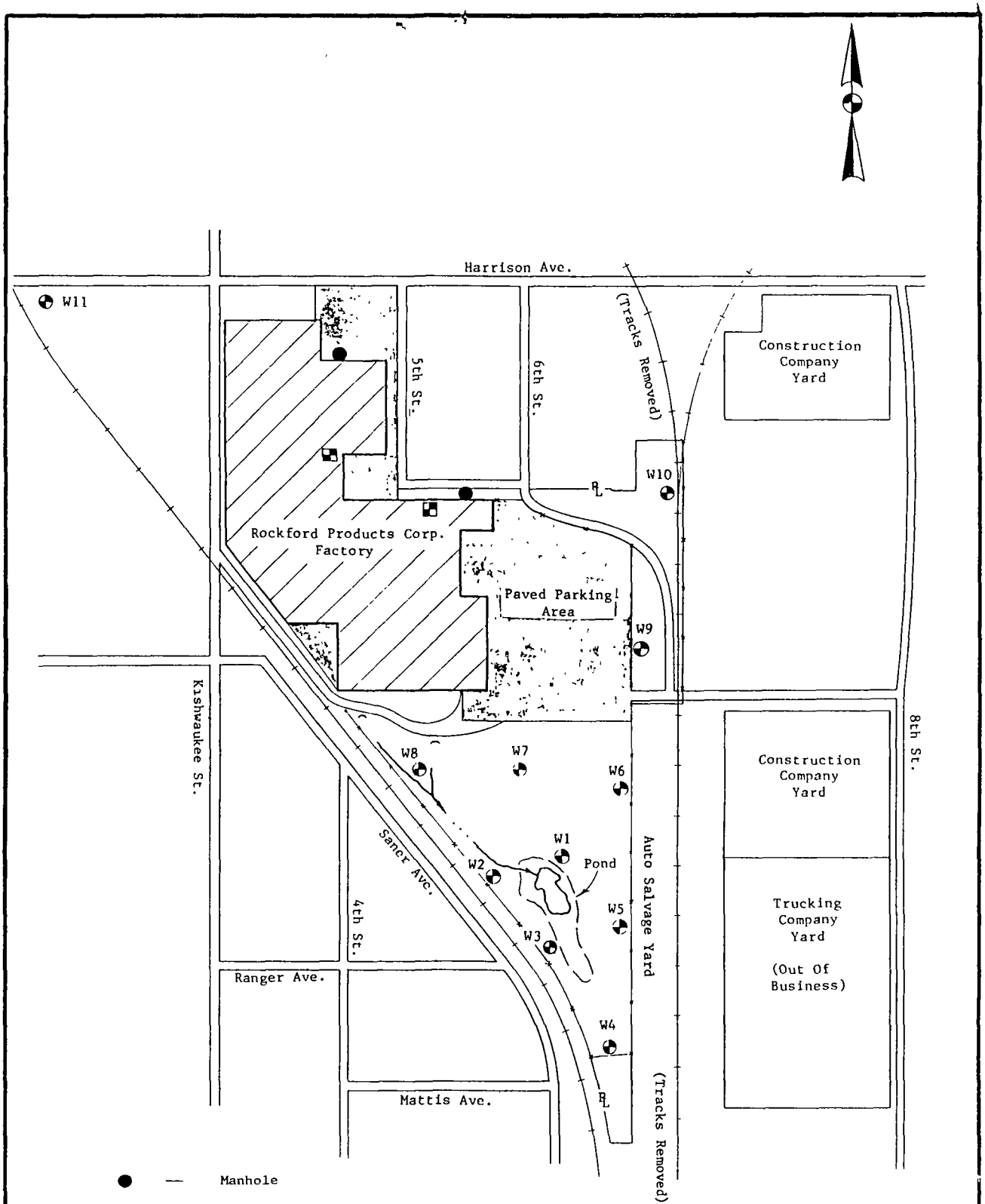


Figure 9.

ROCKFORD PRODUCTS CORP.	
Well Locations (Proposed)	
Date 2-14-86	Scale 1" = 300'

M. RAPPS ASSOCIATES, INC.

TESTING ENGINEERS, INC.
ROUTE 52 SOUTH
DIXON, ILLINOIS 61021

LOG OF BORING NO. W1

OJECT GROUNDWATER MONITORING WELLS JOB NO. 1889

WNER ROCKFORD PRODUCTS CORPORATION ORDER NO. 70073

CHITECT-ENGINEER ROCKFORD PRODUCTS CORPORATION

OCATION PLANT NO. 3, ROCKFORD, ILLINOIS

SEE WELL LOCATION PLAN

ATUM NONE

ELEV.	SOIL DESCRIPTION	DEPTH	SAMPLE NO.	SAMPLE TYPE	DIST.	REC.	N	γ	Q_u	w%
	Dark brown SANDY CLAY TOPSOIL	0.0								
		1.5								
	Reddish brown fine and medium SAND, trace clay									
		4.5								
	Brown fine and medium SAND									
		11.0								
	Light brown SAND, trace fine gravel									
		15.0								
	Medium light brown medium SAND									
		20								
		25								
		30	1	SS	X	X	22			
		32.0								
	Brown SAND, some fine and medium gravel	35								
		36.5	2	SS	X	X	29			
	END OF BORING									

illed By PJH Checked RNL

pector

ting Started 1/7/85

WATER LEVELS

While Drilling -29.5'

On Completion -28.7'

TESTING ENGINEERS, INC.
ROUTE 52 SOUTH
DIXON, ILLINOIS 61021

LOG OF BORING NO. W2

PROJECT GROUNDWATER MONITORING WELLS JOB NO. 1889

OWNER ROCKFORD PRODUCTS CORPORATION ORDER NO. 70073

ARCHITECT-ENGINEER ROCKFORD PRODUCTS CORPORATION

LOCATION PLANT NO. 3, ROCKFORD, ILLINOIS

SEE WELL LOCATION PLAN

DATUM NONE

ELEV.	SOIL DESCRIPTION	DEPTH	SAMPLE NO.	SAMPLE TYPE	DIST.	REC.	N	γ	Q_u	w%
	Dark brown SAND, trace clay	0.0								
	Brown SAND, some gravel	1.5								
	Light brown medium SAND	4.0								
	Brown SAND, trace fine and medium gravel	7.0								
		10.0								
		15								
		20								
	Medium light brown medium SAND	25								
		30	1	SS			23			
		35	2	SS			20			
	END OF BORING	36.5								

Drilled By PJH Checked RNL
Inspector
Boring Started 1/8/85

WATER LEVELS
While Drilling -30.0'
On Completion -29.8'

TESTING ENGINEERS, INC.
ROUTE 52 SOUTH
DIXON, ILLINOIS 61021

LOG OF BORING NO. W3

PROJECT GROUNDWATER MONITORING WELLS JOB NO. 1889

OWNER ROCKFORD PRODUCTS CORPORATION ORDER NO. 70073

ARCHITECT-ENGINEER ROCKFORD PRODUCTS CORPORATION

LOCATION PLANT NO. 3, ROCKFORD, ILLINOIS

SEE WELL LOCATION PLAN

DATUM NONE

ELEV.	SOIL DESCRIPTION	DEPTH	SAMPLE NO.	SAMPLE TYPE	DIST.	REC.	N	γ	Q_u	w%
	Dark brown SAND, trace clay	0.0								
	Brown SAND, some gravel	2.0								
	Light brown SAND, trace fine and medium gravel	5.5								
	Light brown medium SAND	9.0								
		15								
		20								
	Light brown SAND, trace to some fine and medium gravel	22.0								
		25								
		30	1	SS	X	X	26			
		35	2	SS	X	X	26			
	END OF BORING	36.5								

Drilled By PJH Checked RNL
Inspector
Boring Started 1/8/85
Boring Completed 1/8/85

WATER LEVELS
While Drilling -30.0'
On Completion -28.8'
After 72 Hours -28.8'

TEI-2

TESTING ENGINEERS, INC.
ROUTE 52 SOUTH
DIXON, ILLINOIS 61021

LOG OF BORING NO. W4

PROJECT GROUNDWATER MONITORING PROGRAM, PLANT 3 JOB NO. 1889

OWNER ROCKFORD PRODUCTS CORPORATION ORDER NO.

ARCHITECT-ENGINEER M. RAPPS ASSOCIATES, INC.

LOCATION KISHWAUKEE STREET AND HARRISON AVENUE
ROCKFORD, ILLINOIS

DATUM U.S.G.S.

ELEV.	SOIL DESCRIPTION	DEPTH	SAMPLE NO.	SAMPLE TYPE	DIST.	REC.	N	γ	Q_u	w%
729.8		0.0								
728.3	Loose black CLAYEY SAND	1.5	1	SS	X	X	6			
	Loose reddish brown fine SAND		2	SS	X	X	7			
724.8		5.0	3	SS	X	X	4			
	Loose to medium light brown fine SAND		4	SS	X	X	16			
		10	5	SS	X	X	18			
717.3		12.5								
	Medium light brown fine SAND, trace fine gravel		6	SS	X		16			
		15	7	SS	X	X	21			
712.3		17.5								
			8	SS	X	X	19			
		20	9	SS	X	X	22			
			10	SS	X	X	19			
	Medium light brown fine SAND	25	11	SS	X	X	20			
			12	SS	X	X	21			
		30	13	SS	X	X	25			
			14	SS	X	X	20			
694.8		35.0								
	Medium light brown fine SAND, trace fine gravel		15	SS	X	X	26			
692.3		37.5								
	Medium brown fine SAND		16	SS	X	X	19			
		40								
	END OF BORING		17	SS	X	X	26			
687.3		42.5								

Drilled By PJH Checked FJH
Inspector
Boring Started 10/31/86
Boring Completed 10/31/86

WATER LEVELS
While Drilling -35.0' (694.8)
On Completion -33.9' (695.9)
After Hours SEE MONITORING

TEI-2

TESTING ENGINEERS, INC.
ROUTE 52 SOUTH
DIXON, ILLINOIS 61021

LOG OF BORING NO. W5

PROJECT GROUNDWATER MONITORING PROGRAM, PLANT 3 JOB NO. 1889

OWNER ROCKFORD PRODUCTS CORPORATION ORDER NO.

ARCHITECT-ENGINEER M. RAPPS ASSOCIATES, INC.

LOCATION KISHWAUKEE STREET AND HARRISON AVENUE
ROCKFORD, ILLINOIS

DATUM U.S.G.S.

ELEV.	SOIL DESCRIPTION	DEPTH	SAMPLE NO.	SAMPLE TYPE	DIST.	REC.	N	γ	Q_u	w%
723.6	SEE NOTE 1	0.0								
722.7		0.9	1	SS	X	X	7			
	Loose to medium light brown fine SAND		2	SS	X	X	9			
		5	3	SS	X	X	12			
	NOTE 1: Black CLAYEY SAND with some broken concrete pieces (FILL)		4	SS	X	X	11			
		10	5	SS	X	X	15			
710.6		13.0								
709.6	SEE NOTE 2	14.0	6	SS	X	X	16			
	Medium light brown fine SAND		7	SS	X	X	14			
	NOTE 2: Medium light brown fine SAND, some fine gravel	20	8	SS	X	X	16			
			9	SS	X	X	26			
701.1		22.5								
699.6	SEE NOTE 3	24.0	10	SS	X	X	24			
	Medium light brown fine SAND, trace fine gravel		11	SS	X	X	26			
	NOTE 3: Medium light brown SAND and GRAVEL	30	12	SS	X	X	15			
			13	SS	X	X	12			
			14	SS	X	X	17			
688.6	END OF BORING	35.0								

Drilled By PJH Checked FJH
Inspector
Boring Started 10/30/86
Boring Completed 10/30/86

WATER LEVELS
While Drilling -25.0' (698.6)
On Completion -27.5' (696.1)
After Hours SEE MONITORING

TEI-2

TESTING ENGINEERS, INC.
ROUTE 52 SOUTH
DIXON, ILLINOIS 61021

LOG OF BORING NO. W6

PROJECT GROUNDWATER MONITORING PROGRAM, PLANT 3 JOB NO. 1889

OWNER ROCKFORD PRODUCTS CORPORATION ORDER NO.

ARCHITECT-ENGINEER M. RAPPS ASSOCIATES, INC.

LOCATION KISHWAUKEE STREET AND HARRISON AVENUE
ROCKFORD, ILLINOIS

DATUM U.S.G.S.

ELEV.	SOIL DESCRIPTION	DEPTH	SAMPLE NO.	SAMPLE TYPE	DIST.	REC.	N	γ	Q_u	w%
720.9	SEE NOTE 1	0.0								
720.2	Loose black CLAYEY SAND	0.7	1	SS			7			
717.4		3.5	2	SS			6			
	Loose to medium brown fine SAND	5	3	SS			10			
			4	SS			5			
		10	5	SS			10			
708.4		12.5	6	SS			10			
	Medium light brown fine SAND	15	7	SS			15			
			8	SS			14			
		20	9	SS			9			
697.4		23.5	10	SS			11			
	Medium brown SAND, some fine gravel	25	11	SS			11			
			12	SS			19			
		30	13	SS			18			
			14	SS			15			
685.9	END OF BORING	35.0								
	NOTE 1: MIXED FILL - CINDERS, GRAVEL, SILTY CLAY									

Drilled By PJH Checked FJH
Inspector
Boring Started 10/29/86
Boring Completed 10/30/86

WATER LEVELS
While Drilling -25.0' (695.9)
On Completion -25.0' (695.9)
After ___ Hours SEE MONITORING

TEI-2

TESTING ENGINEERS, INC.
ROUTE 52 SOUTH
DIXON, ILLINOIS 61021

LOG OF BORING NO. W7

PROJECT GROUNDWATER MONITORING PROGRAM, PLANT 3 JOB NO. 1889

OWNER ROCKFORD PRODUCTS CORPORATION ORDER NO.

ARCHITECT-ENGINEER M. RAPPS ASSOCIATES, INC.

LOCATION KISHWAUKEE STREET AND HARRISON AVENUE

ROCKFORD, ILLINOIS

DATUM U.S.G.S.

ELEV.	SOIL DESCRIPTION	DEPTH	SAMPLE NO.	SAMPLE TYPE	DIST.	REC.	N	γ	Q_u	w%
718.7	SEE NOTE 1	0.0								
718.2	Loose black CLAYEY SAND	0.5	1	SS	X	X	11			
715.7	Loose brown SAND, some gravel in top 6 inches	3.0	2	SS	X	X	9			
		5	3	SS	X	X	5			
711.2		7.5	4	SS	X	X	5			
	Loose brown fine SAND, trace fine gravel in thin layers at various intervals	10	5	SS	X	X	4			
			6	SS	X	X	4			
		15	7	SS	X	X	5			
			8	SS	X	X	7			
		20	9	SS	X	X	9			
			10	SS	X	X	9			
693.7		25.0								
	Medium brown SAND and GRAVEL		11	SS	X	X	10			
			12	SS	X	X	14			
688.7	END OF BORING	30.0								
	NOTE 1: MIXED FILL - Black CINDERS, SAND, SILTY CLAY									

Drilled By PJH Checked FJH
Inspector
Boring Started 10/28/86
Boring Completed 10/29/86
Sheet 1 of 1 Sheets

WATER LEVELS
While Drilling -21.5' (697.2)
On Completion -23.3' (695.4)
After ___ Hours SEE MONITORING

TEI-2

TESTING ENGINEERS, INC.
ROUTE 52 SOUTH
DIXON, ILLINOIS 61021

LOG OF BORING NO. W8

PROJECT GROUNDWATER MONITORING PROGRAM, PLANT 3 JOB NO. 1889

OWNER ROCKFORD PRODUCTS CORPORATION ORDER NO.

ARCHITECT-ENGINEER M. RAPPS ASSOCIATES, INC.

LOCATION KISHWAUKEE STREET AND HARRISON AVENUE

ROCKFORD, ILLINOIS

DATUM U.S.G.S.

ELEV.	SOIL DESCRIPTION	DEPTH	SAMPLE NO.	SAMPLE TYPE	DIST.	REC.	N	γ	Q_u	w%
719.3	Medium black to dark brown CLAYEY FINE SAND, trace fine gravel	0.0	1	SS			13			
715.8		3.5	2	SS			14			
	Loose to medium reddish brown to brown fine SAND, trace fine gravel	5	3	SS			10			
			4	SS			4			
		10	5	SS			9			
705.8		13.5	6	SS			7			
	Loose to medium light brown fine SAND	15	7	SS			5			
			8	SS			7			
		20								
697.3		22.0	9	SS			18			
	Loose to medium light brown SAND, some gravel		10	SS			10			
		25	11	SS			5			
			12	SS			12			
		30	13	SS			23			
686.8	END OF BORING	32.5								

Drilled By PJH Checked FJH
Inspector
Boring Started 10/28/86
Boring Completed 10/28/86

WATER LEVELS
While Drilling -24.0' (695.3)
On Completion -23.9' (695.4)
After ___ Hours SEE MONITORING

TEI-2

TESTING ENGINEERS, INC.
ROUTE 52 SOUTH
DIXON, ILLINOIS 61021

LOG OF BORING NO. W9

PROJECT GROUNDWATER MONITORING PROGRAM, PLANT 3 JOB NO. 1889

OWNER ROCKFORD PRODUCTS CORPORATION ORDER NO.

ARCHITECT-ENGINEER M. RAPPS ASSOCIATES, INC.

LOCATION KISHWAUKEE STREET AND HARRISON AVENUE

ROCKFORD, ILLINOIS

DATUM U.S.G.S.

ELEV.	SOIL DESCRIPTION	DEPTH	SAMPLE NO.	SAMPLE TYPE	DIST.	REC.	N	γ	Q_u	w%
723.6	SEE NOTE 1	0.0								
723.1	SEE NOTE 2	0.5								
722.1		1.5	1	SS	X	X	7			
	Loose light brown fine SAND		2	SS	X	X	6			
718.6		5.0								
	Loose reddish brown fine SAND		3	SS	X	X	6			
716.1		7.5								
			4	SS	X	X	8			
		10								
			5	SS	X	X	14			
	Medium light brown fine SAND		6	SS	X	X	13			
		15								
			7	SS	X	X	18			
			8	SS	X	X	16			
		20								
			9	SS	X	X	16			
701.6		22.0								
			10	SS	X	X	11			
		25								
	Medium light brown fine SAND, trace to some fine gravel		11	SS	X	X	18			
			12	SS	X	X	15			
		30								
			13	SS	X	X	22			
			;4	SS	X	X	15			
688.6		35.0								
	END OF BORING									
	NOTE 1: Black CLAYEY SAND									
	NOTE 2: Loose dark brown fine SAND, some clay, trace fine gravel									

Drilled By PJH Checked FJH
Inspector
Boring Started 11/3/86
Boring Completed 11/3/86

WATER LEVELS
While Drilling -26.5' (697.1)
On Completion -27.5' (696.1)
After ___ Hours SEE MONITORING

TEI-2

TESTING ENGINEERS, INC.
ROUTE 52 SOUTH
DIXON, ILLINOIS 61021

LOG OF BORING NO. W10

PROJECT GROUNDWATER MONITORING PROGRAM, PLANT 3 JOB NO. 1889

OWNER ROCKFORD PRODUCTS CORPORATION ORDER NO.

ARCHITECT-ENGINEER M. RAPPS ASSOCIATES, INC.

LOCATION KISHWAUKEE STREET AND HARRISON AVENUE

ROCKFORD, ILLINOIS

DATUM U.S.G.S.

ELEV.	SOIL DESCRIPTION	DEPTH	SAMPLE NO.	SAMPLE TYPE	DIST.	REC.	N	γ	Q_u	w%
730.6	Loose black to brown CINDERS, SAND, GRAVEL - FILL	0.0	1	SS	X	X	6			
728.1		2.5	2	SS	X	X	11			
	Medium to very loose reddish brown fine SAND	5	3	SS	X	X	3			
			4	SS	X	X	4			
721.1		9.5	5	SS	X	X	12			
			6	SS	X	X	14			
		15	7	SS	X	X	22			
			8	SS	X	X	17			
		20	9	SS	X	X	26			
	Medium to dense light brown fine SAND		10	SS	X	X	29			
		25	11	SS	X	X	38			
			12	SS	X	X	27			
		30	13	SS	X	X	25			
			14	SS	X	X	23			
		35	15	SS	X	X	18			
			16	SS	X	X	16			
		40	17	SS	X		18			
688.1	END OF BORING	42.5								

Drilled By PJH Checked FJH
Inspector
Boring Started 11/3/86
Boring Completed 11/3/86
Sheet 1 of 1 Sheets

WATER LEVELS
While Drilling -35.0' (695.6)
On Completion -34.1' (696.5)
After ___ Hours SEE MONITORING
After ___ Hours ITEL PIT

TEI-2

TESTING ENGINEERS, INC.
ROUTE 52 SOUTH
DIXON, ILLINOIS 61021

LOG OF BORING NO. W11

PROJECT GROUNDWATER MONITORING PROGRAM, PLANT 3 JOB NO. 1889

OWNER ROCKFORD PRODUCTS CORPORATION ORDER NO.

ARCHITECT-ENGINEER M. RAPPS ASSOCIATES, INC.

LOCATION KISHWAUKEE STREET AND HARRISON AVENUE
ROCKFORD, ILLINOIS

DATUM U.S.G.S.

ELEV.	SOIL DESCRIPTION	DEPTH	SAMPLE NO.	SAMPLE TYPE	DIST.	REC.	N	γ	Q_u	w%
720.3	SEE NOTE 1	0.0								
719.8	Medium dark brown SANDY SILTY CLAY	0.5	1	SS	X		5		0.5 P	16.7
717.8	Loose reddish brown fine SAND, trace gravel	2.5	2	SS	X	X	7			
714.8	Loose light brown fine SAND, trace fine gravel	5.5	3	SS	X	X	9			
			4	SS	X	X	10			
710.3		10.0	5	SS	X	X	13			
			6	SS	X	X	12			
		15	7	SS	X	X	19			
			8	SS	X	X	16			
		20	9	SS	X	X	19			
	Medium ligh brown fine SAND		10	SS	X	X	17			
		25	11	SS	X	X	23			
			12	SS	X	X	16			
		30	13	SS	X	X	13			
			14	SS	X	X	15			
685.3	END OF BORING	35.0								
	NOTE 1: Black SILTY CLAY, some sand - TOPSOIL									

Drilled By PJH Checked FJH
Inspector
Boring Started 11/4/86
Boring Completed 11/4/86
Sheet 1 of 1 Sheets

WATER LEVELS
While Drilling -26.0' (694.3)
On Completion -25.0' (695.3)
After ___ Hours SEE MONITORING

APPENDIX F

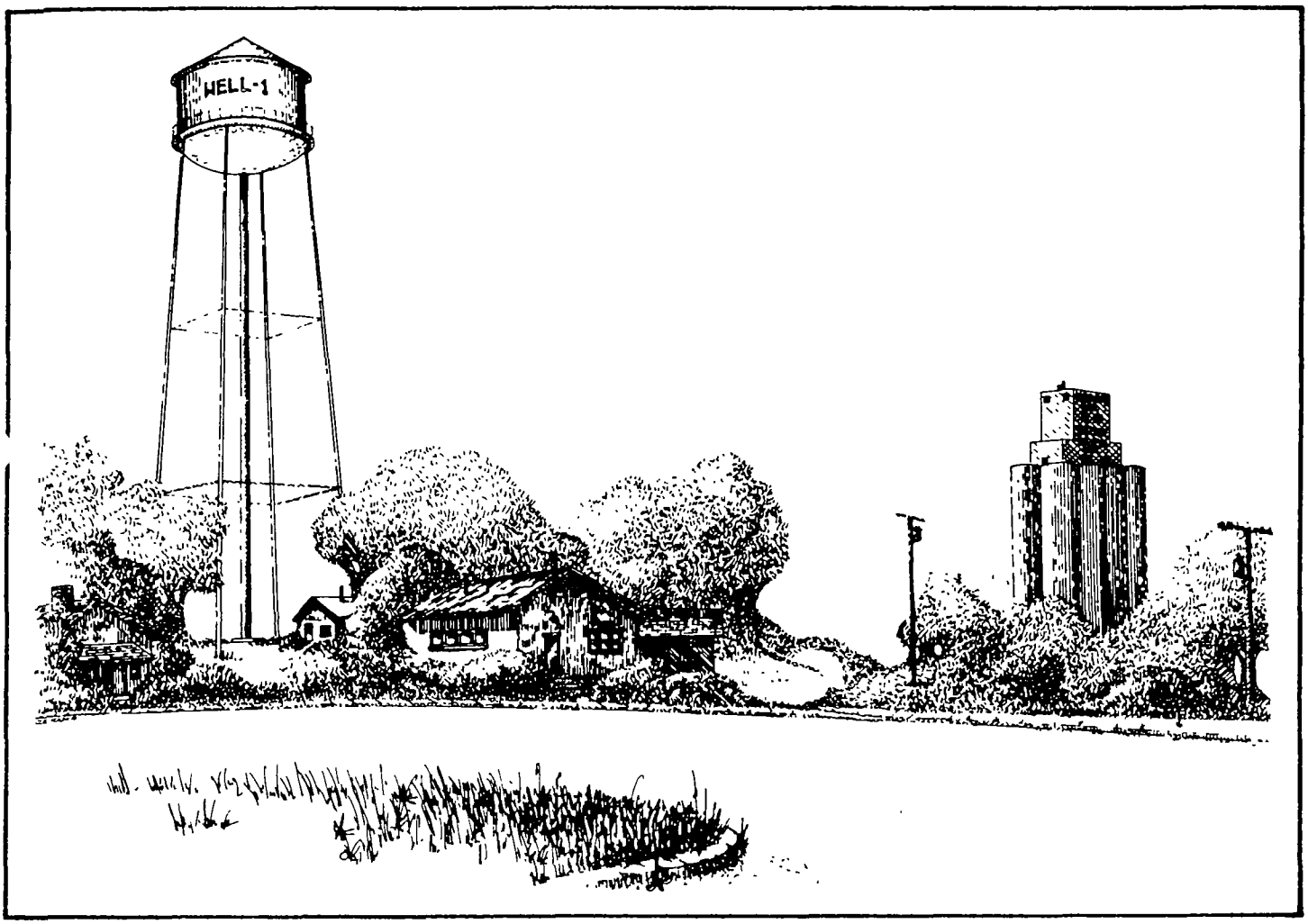
LOCATIONS OF PUBLIC SUPPLY WELLS IN ROCKFORD

Illinois
Environmental
Protection Agency

Division of Public Water Supplies
2200 Churchill Road
Springfield, Illinois 62794-9276

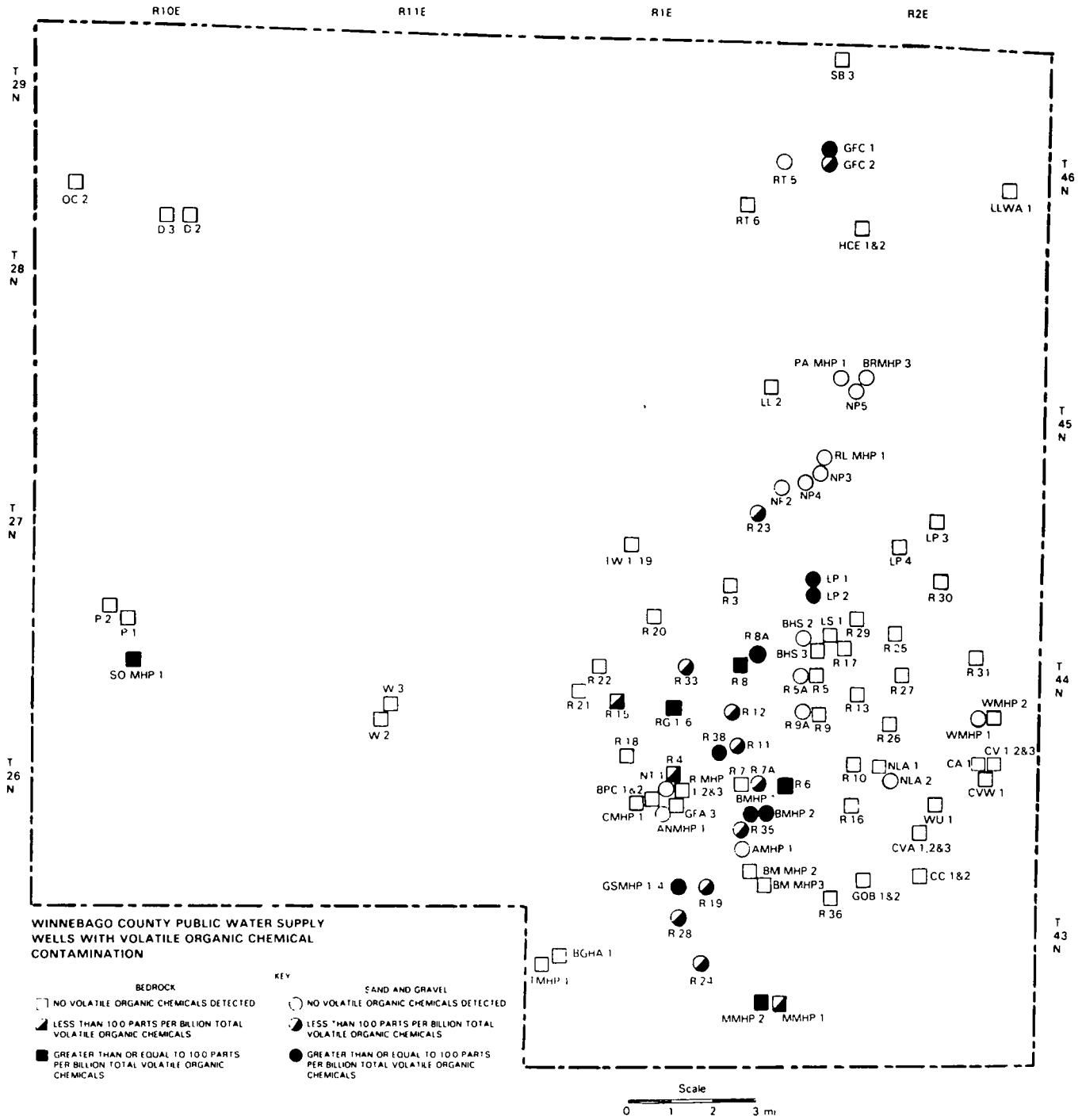
November 1988

Winnebago County Groundwater Study



Prepared by the Illinois Environmental Protection Agency

Figure 5. Winnebago County Public Water Supply Wells With Volatile Organic Chemical Contamination



AMHP 1	American Mobile Home Park #1
ANMHP 1	Anne's Mobile Home Park #1
BPC 1&2	Balcitis Pump Corporation #1 & #2
BMHP 1	Barrett's Mobile Home Park #1
BMHP 2	Barrett's Mobile Home Park #2
BRMHP 3	Bel-Rock Mobile Home Park #3
BM MHP 2	Bill Mar Heights Mobile Home Park #2
BM MHP3	Bill Mar Heights Mobile Home Park #3
BGHA 1	Blue and Gold Homeowners Association #1
BHS 2	Bradley Heights Subdivision #2
BHS 3	Bradley Heights Subdivision #3
CVA 1,2&3	Cherry Vale East Apartments #'s 1, 2 & 3
CV 1,2&3	Cherry Valley #'s 1, 2 & #
CVW 1	Cherry View Apartments #1
CMHP 1	Clark's Mobile Home Park #1
CA 1	Connor Apartments #1
CC 1&2	Conventry Creek #1 & #2
D 2	Durand #2
D 3	Durand #3
GFA 3	G and F Apartments #3
GSMHP 1-4	Gem Suburban Mobile Home Park #'s 1-4
GFC 1	Goldie Floberg Center #1
GFC 2	Goldie Floberg Center #2
GOB 1&2	Great Oaks Beacon #1 & #2
HCE 1&2	Honegah Country Estates #1 & #2
LS 1	Larchmont Subdivision #1
LL 2	Leanna Lakeside #2
LLWA 1	Legand Lakes Water Association #1
LP 1	Loves Park #1
LP 2	Loves Park #2
LP 3	Loves Park #3
LP 4	Loves Park #4
MMHP 1	Morristown Mobile Home Park #1
MMHP 2	Morristown Mobile Home Park #2
NT 1	Neartown #1
NLA 1	Newburg Landowners Association #1
NLA 2	Newburg Landowners Association #2
NP2	North Park #2
NP3	North Park #3
NP4	North Park #4
NP5	North Park #5
OC 2	Otter Creek Lake Utilities District #2
P 1	Pecatonica #1
P 2	Pecatonica #2
PA MHP 1	Phil-Aire Estates Mobile Home Park #1
RL MHP 1	Rainbow Lane Mobile Home Park #1
R MHP 1 2&3	Riverview Mobile Home Park #'s 1, 2 & 3
R 3	Rockford #3
R 4	Rockford #4
R 5	Rockford #5
R 5A	Rockford #5A
RG 1-6	Rockford Group
R 6	Rockford #6
R 7	Rockford #7
R 7A	Rockford #7A
R 8	Rockford #8
R 8A	Rockford #8A
R 9	Rockford #9
R 9A	Rockford #9A
R 10	Rockford #10
R 11	Rockford #11
R 12	Rockford #12
R 13	Rockford #13
R 15	Rockford #15
R 16	Rockford #16
R 17	Rockford #17
R 18	Rockford #18
R 19	Rockford #19
R 20	Rockford #20
R 21	Rockford #21
R 22	Rockford #22
R 23	Rockford #23
R 24	Rockford #24
R 25	Rockford #25
R 26	Rockford #26
R 27	Rockford #27
R 28	Rockford #28
R 29	Rockford #29
R 30	Rockford #30
R 31	Rockford #31
R 33	Rockford #33
R 35	Rockford #35
R 36	Rockford #36
R 38	Rockford #38
RT 5	Rocton #5
RT 6	Rocton #6
SO MHP 1	Six Oaks Mobile Home Park #1
SB 3	South Beloit #3
TMHP 1	Timberlane Mobile Home Park #1
TW 1-19	Tullock Woods #'s 1-19
WU 1	Wildwood Utility #1
W 2	Winnebago #2
W 3	Winnebago #3
WMHP 1	Woodland Mobile Home Park #1
WMHP 2	Woodland Mobile Home Park #2

APPENDIX G

IEPA SITE PHOTOGRAPHS

DATE: 8-16-89

TIME: 10:45 AM

Photograph by:

John Morgan

Location:

Rockford Products Plant #3 (RP3)

Comments: Picture taken toward

West #1

G201

Location of well on Figure 3-2

DATE: 8-16-89

TIME: 12:00 NOON

Photograph by:

John Morgan

Location: RP3

Comments: Picture taken toward

North #2

G113

DATE: 8-16-89

TIME: 2:15

Photograph by:

John Morgan

Location:

R.P. 3

Comments: Picture taken toward

North #3

G101

DATE: 8-16-89

TIME: 2:15

Photograph by:

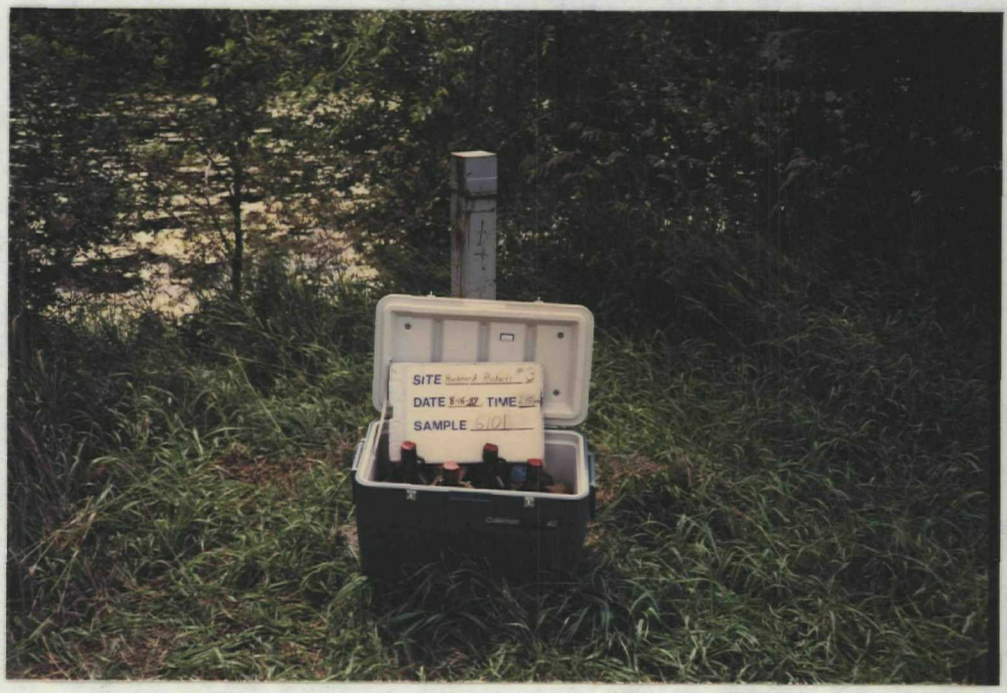
John Morgan

Location: R.P.3

Comments: Picture taken toward

WEST #4

G101



DATE: 8-16-89

TIME: 1:50 PM

PHOTOGRAPH TAKEN BY:

John MorgAN

PHOTO NUMBER:

LOCATION: R.P. 3

COMMENTS: PICTURE TAKEN TOWARD

Southwest #5

G108

DATE:

TIME:

PHOTOGRAPH TAKEN BY:

PHOTO NUMBER:

LOCATION:

COMMENTS: PICTURE TAKEN TOWARD

NO Picture

DATE: 8-16-89

TIME: 4:35 PM

Photograph by:

John Morgan

Location:

R.P. 3

Comments: Picture taken toward

EAST #6

G102

DATE: 8-16-89

TIME: 5:00 PM

Photograph by:

John Morgan

Location: R.P. 3

Comments: Picture taken toward

EAST #7

G103

DATE: 8-16-89

TIME: 3:30 PM

Photograph by:

John Morgan

Location:

R.P.3

Comments: Picture taken toward

NE #8

G104

DATE: 8-16-89

TIME: 3:30 PM

Photograph by:

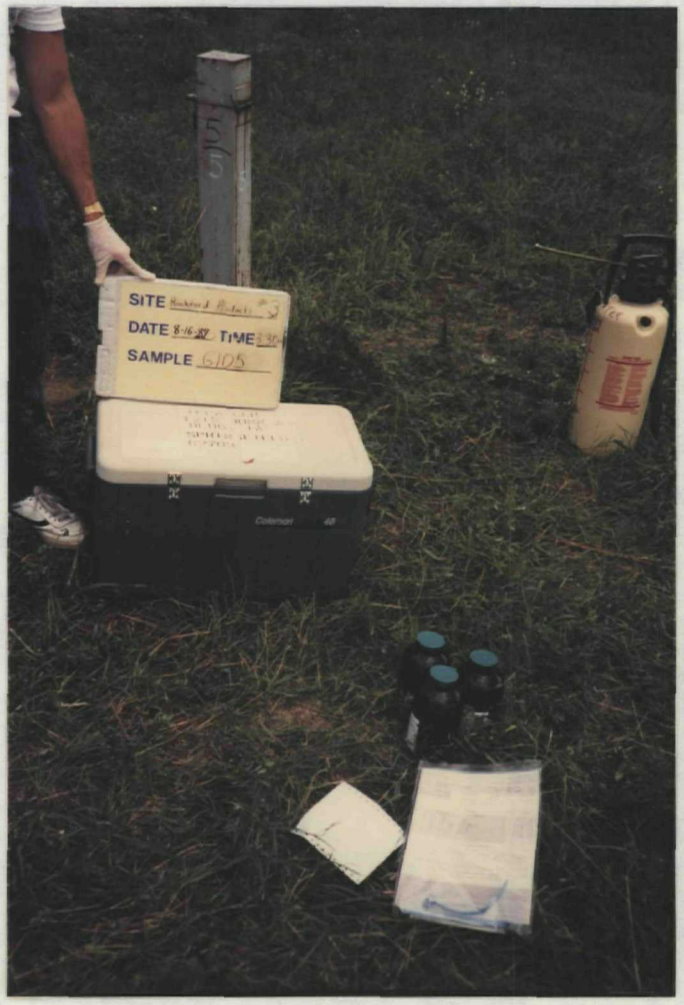
JOHN MORGAN

Location: R.P.3

Comments: Picture taken toward

SE #9

G105



DATE: 8-17-89

TIME: 11:15 AM

Photograph by:

John Morgan

Location:

R.P. 3

Comments: Picture taken toward

WEST #10

X105

DATE: 8-17-89

TIME: 11:15 AM

Photograph by:

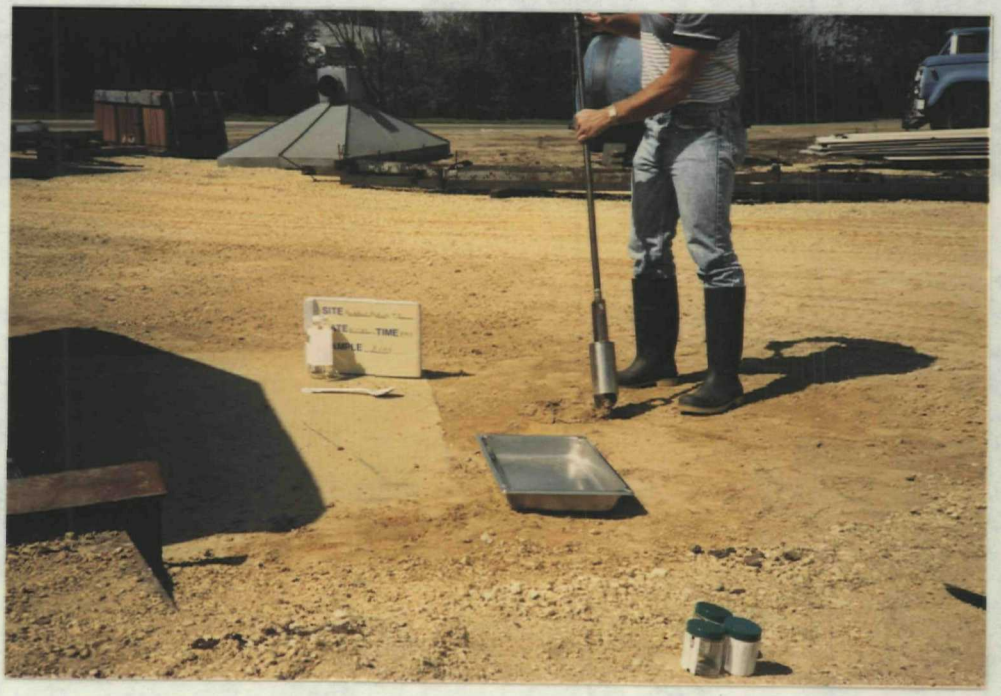
John Morgan

Location: R.P. 3

Comments: Picture taken toward

WEST #11

X105



DATE: 8-17-89

TIME: 12:20 PM

Photograph by:

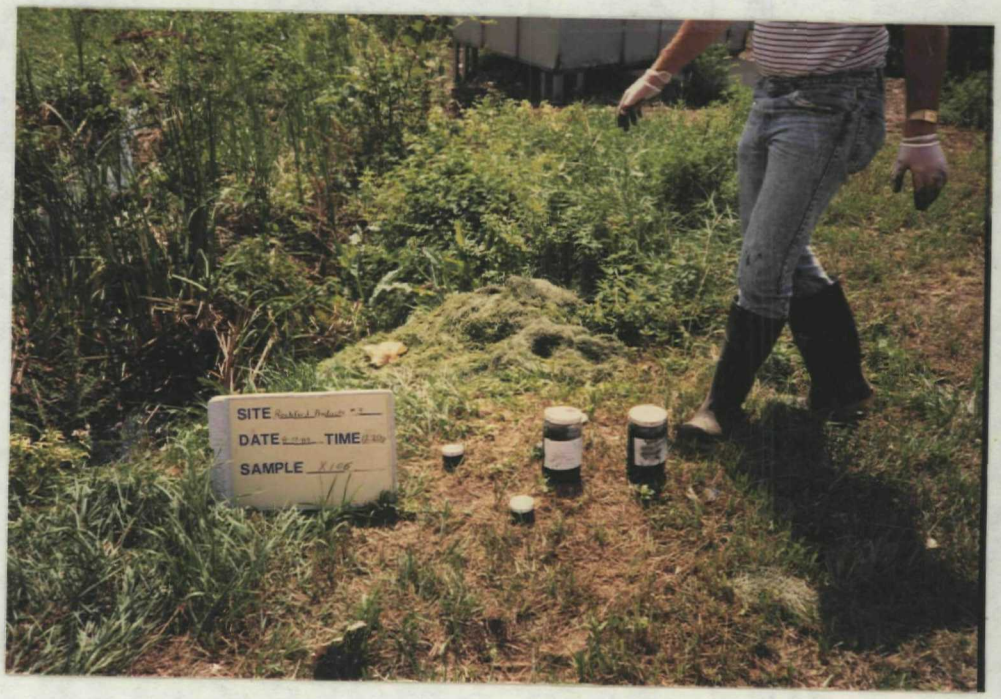
John Morgan

Location:

R.P.3

Comments: Picture taken toward SW #12

X106



DATE: 8-17-89

TIME: 12:20 PM

Photograph by:

John Morgan

Location: R.P.3

Comments: Picture taken toward NW #13

X106

DATE: 8-17-89

TIME: 9:45 AM

Photograph by:

John Morgan

Location:

R.P.3

Comments: Picture taken toward

SOUTH #14

X102

DATE: 8-17-89

TIME: 9:45

Photograph by:

John Morgan

Location: R.P.3

Comments: Picture taken toward

SOUTH #15

X102

DATE: 8-17-89

TIME: 8:35 AM

Photograph by:

John Morgan

Location:

R.P. 3

Comments: Picture taken toward

WEST #16

S101

DATE: 8-17-89

TIME: 8:35 AM

Photograph by:

John Morgan

Location: R.P. 3

Comments: Picture taken toward

WEST #17

S101

DATE: 8-17-89

TIME: 11:00

Photograph by:

John Morgan

Location:

R.P.3

Comments: Picture taken toward

EAST #20

X103

DATE: 8-17-89

TIME: 11:00

Photograph by:

John Morgan

Location: R.P.3

Comments: Picture taken toward

EAST #21

X103

DATE: 8-17-89

TIME: 9:00 AM

Photograph by:

John MorgAN

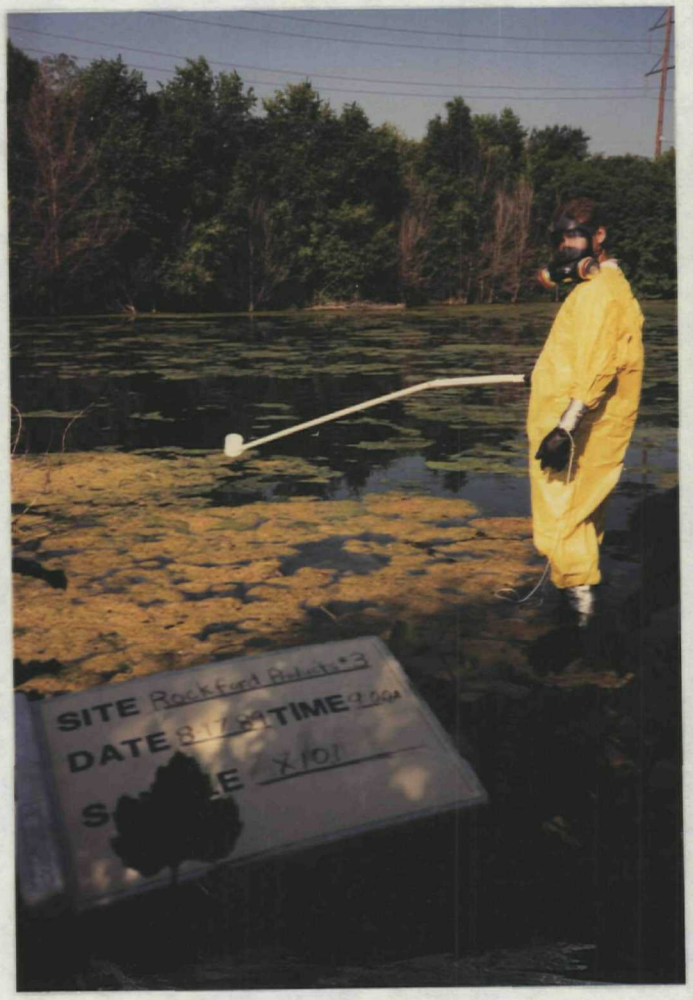
Location:

R.P.3

Comments: Picture taken toward

WEST #18

X101



DATE: 8-17-89

TIME: 11:30 AM

Photograph by:

John MorgAN

Location: R.P.3

Comments: Picture taken toward

EAST #19

X104

DATE: 8-16-89

TIME: _____

PHOTOGRAPH TAKEN BY:

_____

PHOTO NUMBER: _____

LOCATION: _____

_____

_____

COMMENTS: PICTURE TAKEN TOWARD

_____

_____

_____

_____

DATE: _____

TIME: _____

PHOTOGRAPH TAKEN BY:

_____

PHOTO NUMBER: _____

LOCATION: _____

_____

_____

COMMENTS: PICTURE TAKEN TOWARD

_____

_____

_____

_____

No photographs available for Sample X107 (background sample).